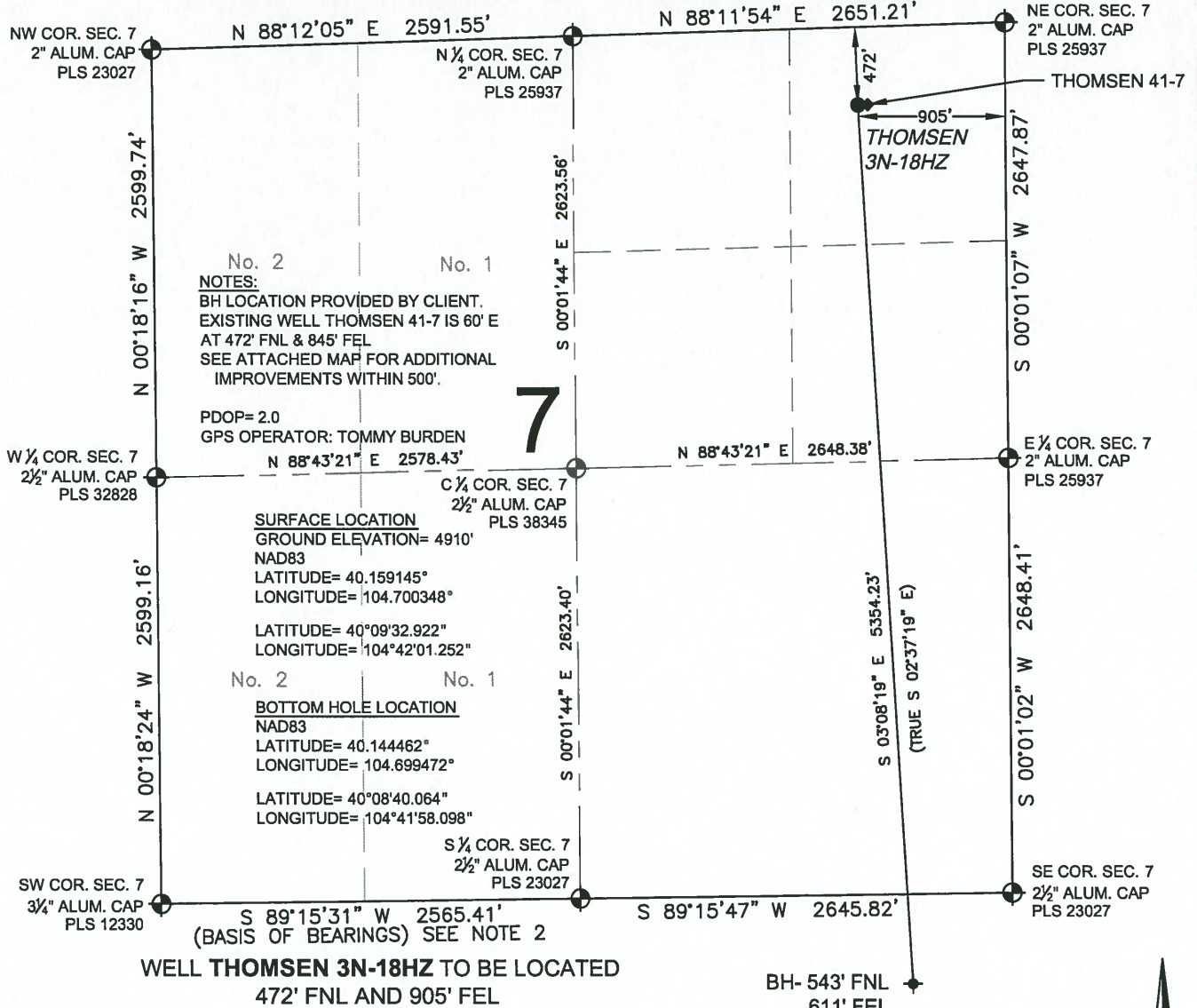


WELL LOCATION CERTIFICATE: THOMSEN 3N-18HZ

SECTION 7, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.



No. 2
NOTES:
 BH LOCATION PROVIDED BY CLIENT.
 EXISTING WELL THOMSEN 41-7 IS 60' E
 AT 472' FNL & 845' FEL
 SEE ATTACHED MAP FOR ADDITIONAL
 IMPROVEMENTS WITHIN 500'.

PDOP=2.0
 GPS OPERATOR: TOMMY BURDEN

SURFACE LOCATION
 GROUND ELEVATION= 4910'
 NAD83
 LATITUDE= 40.159145°
 LONGITUDE= 104.700348°
 LATITUDE= 40°09'32.922"
 LONGITUDE= 104°42'01.252"

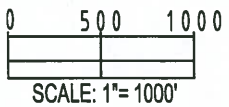
No. 2
BOTTOM HOLE LOCATION
 NAD83
 LATITUDE= 40.144462°
 LONGITUDE= 104.699472°
 LATITUDE= 40°08'40.064"
 LONGITUDE= 104°41'58.098"

WELL THOMSEN 3N-18HZ TO BE LOCATED
 472' FNL AND 905' FEL

BH- 543' FNL
 611' FEL

LEGEND

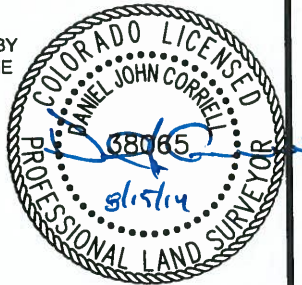
- = EXISTING MONUMENT
- ◆ = BOTTOM HOLE
- = PROPOSED WELL
- ◆ = EXISTING WELL
- BH = BOTTOM HOLE



- NOTES:**
- THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
 - BEARINGS AND DISTANCE SHOWN HEREON ARE GRID AND BASED ON THE COLORADO STATE PLANE COORDINATE SYSTEM, NAD 83/2011 BETWEEN MONUMENTS AS LABELED HEREON AND ELEVATIONS SHOWN ARE NAVD 88, AS DERIVED BY GPS OBSERVATIONS.
 - GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES.
 - ALL LINES SHOWN THAT ARE WITHOUT DIMENSION SHOULD BE CONSIDERED SCALED AND ONLY REPRESENT A GRAPHICAL DEPICTION OF THE APPROXIMATE LOCATION OF SAID LINE.

I, DANIEL JOHN CORRIELL, 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. 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.

DANIEL JOHN CORRIELL, PLS 38065
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
 FOR AND ON BEHALF OF P.F.S., LLC

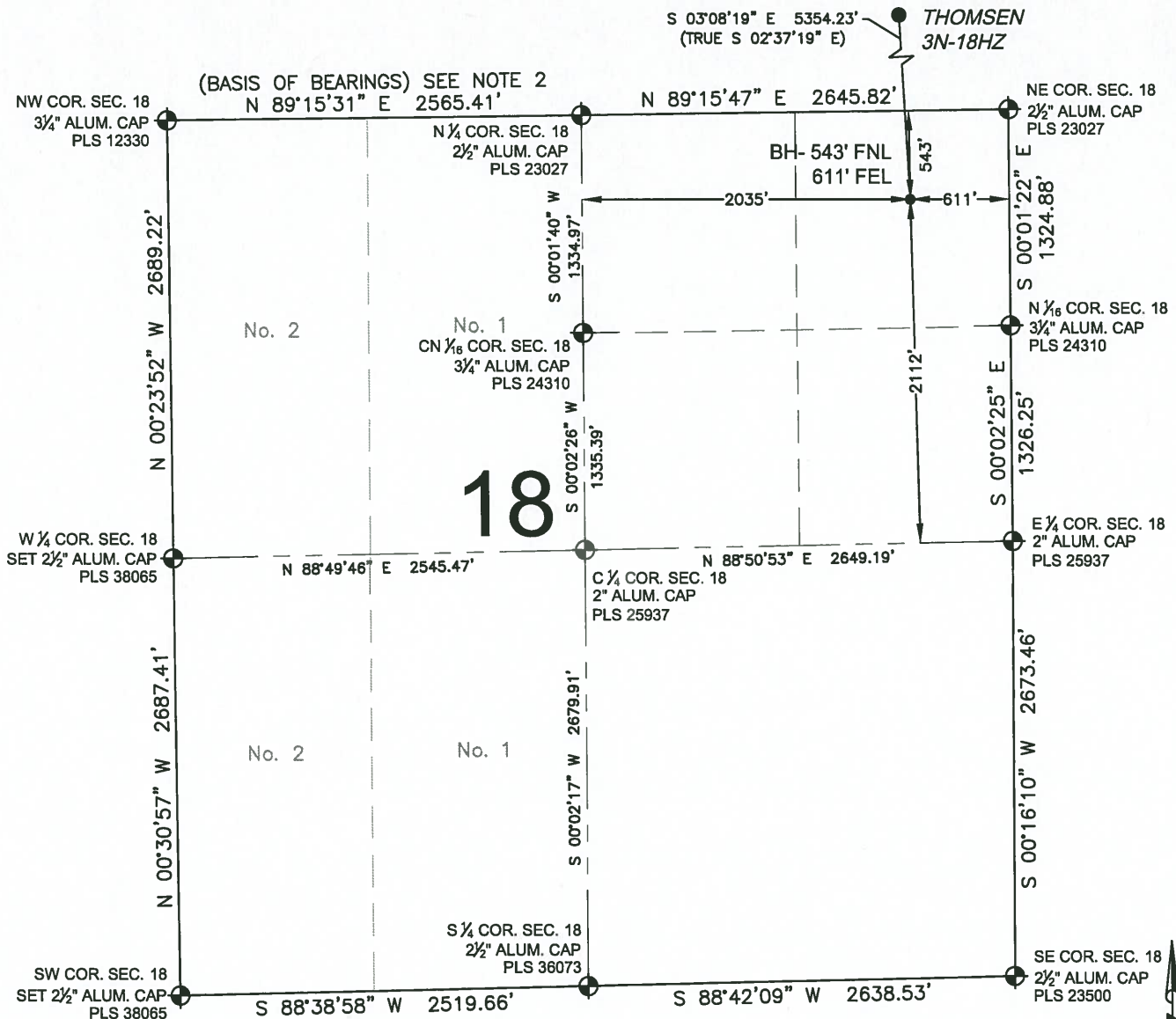


PREPARED BY: Petroleum Field Services, LLC 7535 Hilltop Circle Denver, CO 80221	FIELD DATE: 06-17-14	SURFACE LOCATION:
	DRAWING DATE: 08-11-14	NE 1/4 NE 1/4, SEC. 7, T2N, R65W, 6TH P.M.
	BY: SMD	CHECKED: SMG
	WELD COUNTY, COLORADO	

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.

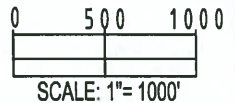
WELL LOCATION CERTIFICATE: THOMSEN 3N-18HZ

SECTION 18, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.



LEGEND

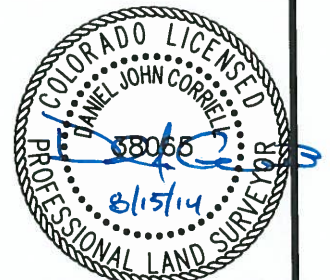
- ⊕ = EXISTING MONUMENT
- ⊙ = PROPOSED WELL
- ⊕ = BOTTOM HOLE
- ◆ = EXISTING WELL
- BH = BOTTOM HOLE



NOTES:

1. THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. BEARINGS AND DISTANCE SHOWN HEREON ARE GRID AND BASED ON THE COLORADO STATE PLANE COORDINATE SYSTEM, NAD 83/2011 BETWEEN MONUMENTS AS LABELED HEREON AND ELEVATIONS SHOWN ARE NAVD 88, AS DERIVED BY GPS OBSERVATIONS.
3. GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES.
4. ALL LINES SHOWN THAT ARE WITHOUT DIMENSION SHOULD BE CONSIDERED SCALED AND ONLY REPRESENT A GRAPHICAL DEPICTION OF THE APPROXIMATE LOCATION OF SAID LINE.

DANIEL JOHN CORRIELL, PLS 38065
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
 FOR AND ON BEHALF OF P.F.S., LLC



SHEET 2 OF 2

PREPARED BY: PFS Petroleum Field Services, LLC 7535 Hilltop Circle Denver, CO 80221	FIELD DATE: 06-17-14	SURFACE LOCATION: NE 1/4 NE 1/4, SEC. 7, T2N, R65W, 6TH P.M. WELD COUNTY, COLORADO
DRAWING DATE: 08-11-14	BY: SMD	CHECKED: SMG

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.