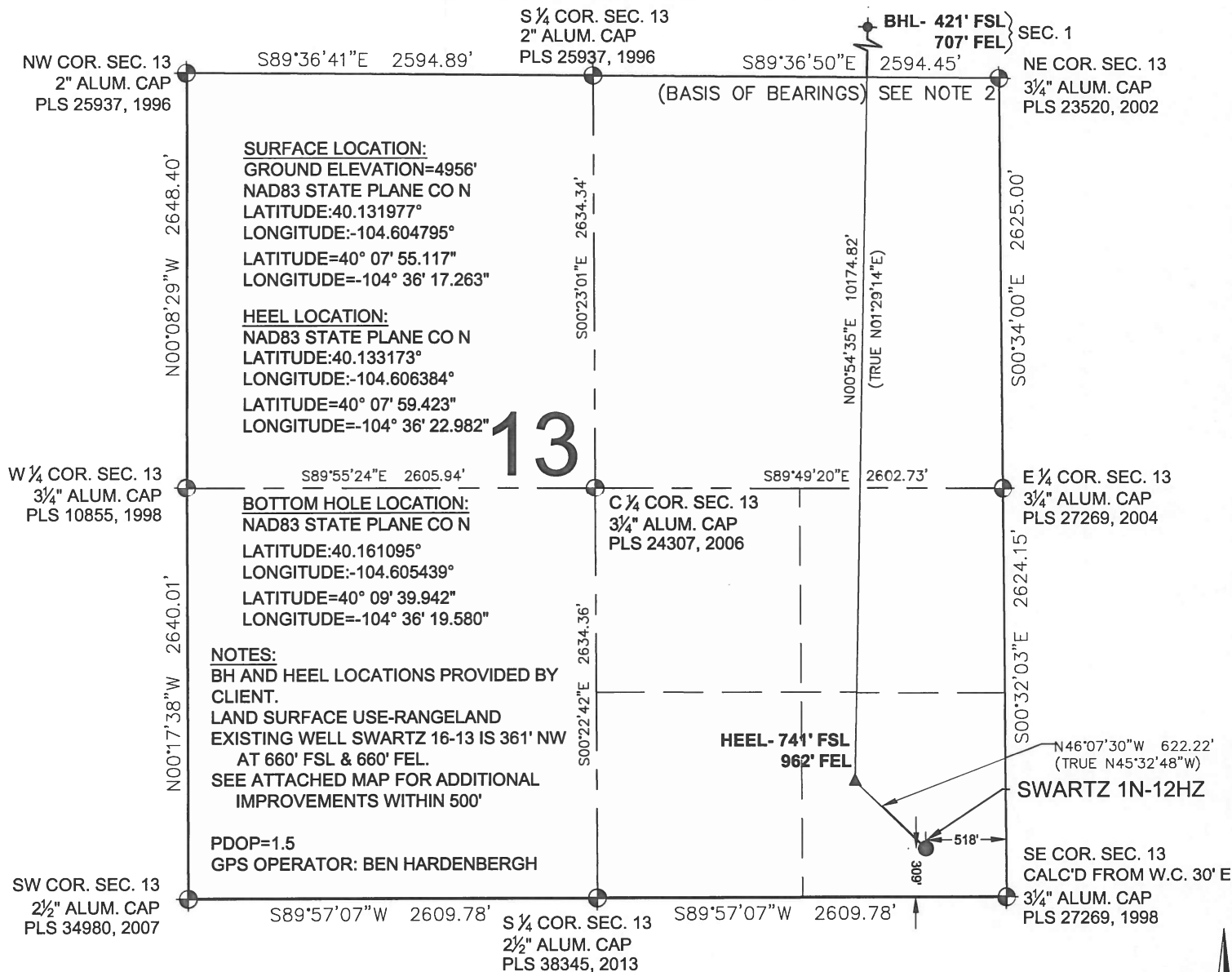


SWARTZ 1N-12HZ WELL LOCATION CERTIFICATE



LEGEND

- = EXISTING MONUMENT
- = CALCULATED POSITION
- = PROPOSED WELL
- ◆ = EXISTING WELL
- ✦ = BOTTOM HOLE
- ▲ = HEEL
- BHL = BOTTOM HOLE LOCATION

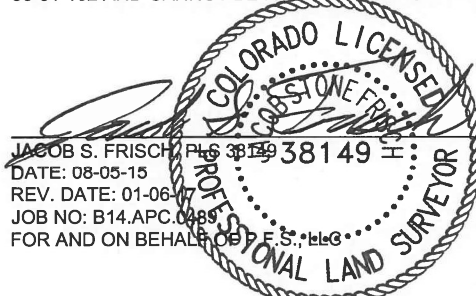
NOTES:

- THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
- BEARINGS ARE BASED ON THE ASSUMPTION THAT THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 13, BEARS S89°36'50"E BETWEEN THE MONUMENTS SHOWN HEREON.
- GRID DISTANCES ARE SHOWN, AS GPS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES. TO GET GROUND DISTANCES MULTIPLY THE SHOWN DISTANCE BY 1.000272228.
- ELEVATIONS SHOWN ARE NAVD 88, AS DERIVED BY GPS OBSERVATIONS.
- CERTIFIED AUGUST 5, 2015 FOR WELLS STAKED ON JANUARY 5, 2015. REVISED JANUARY 6, 2017 FOR HEEL AND BHL CHANGES AND ADDITION OF SECTION 1. CORNERS ON EAST LINE OF SECTION 1 ARE CALCULATED DUE TO ROAD CONSTRUCTION AND WILL BE RESET BY THAT SURVEYOR AFTER CONSTRUCTION.

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 SWARTZ 1N-12HZ TO BE LOCATED 309' FSL & 518' FEL

I, JACOB S. FRISCH, 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.



SHEET 1 OF 3

PREPARED BY:



FIELD DATE:
01-05-15

DRAWING DATE:
01-05-17

BY:
MDC

CHECKED BY:
MLP

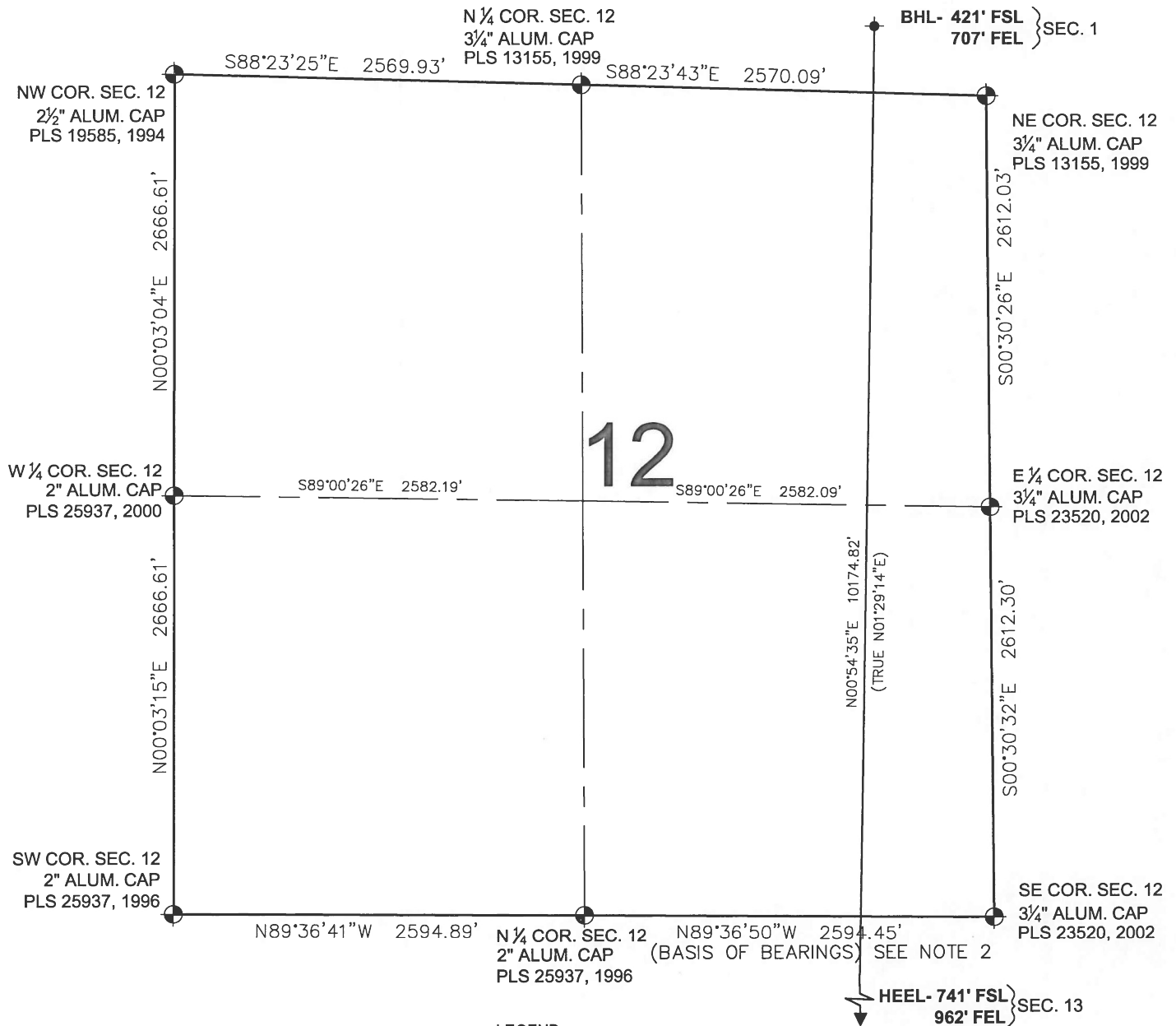
WELL NAME:
SWARTZ 1N-12HZ

SURFACE LOCATION:
SE 1/4 SE 1/4 SEC. 13 T2N, R65W, 6TH P.M.
WELD COUNTY, COLORADO

PREPARED FOR:



SWARTZ 1N-12HZ WELL LOCATION CERTIFICATE



LEGEND

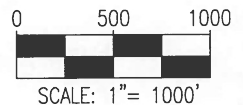
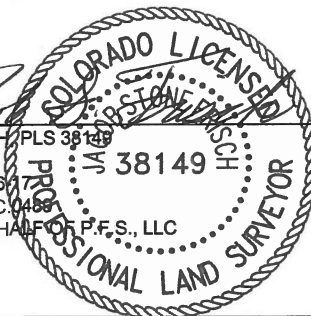
- = EXISTING MONUMENT ♦ = BOTTOM HOLE
- = CALCULATED POSITION ▲ = HEEL
- = PROPOSED WELL BHL = BOTTOM HOLE LOCATION
- ◆ = EXISTING WELL

NOTES:

1. THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
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4. ELEVATIONS SHOWN ARE NAVD 88, AS DERIVED BY GPS OBSERVATIONS.
5. CERTIFIED AUGUST 5, 2015 FOR WELLS STAKED ON JANUARY 5, 2015. REVISED JANUARY 6, 2017 FOR HEEL AND BHL CHANGES AND ADDITION OF SECTION 1. CORNERS ON EAST LINE OF SECTION 1 ARE CALCULATED DUE TO ROAD CONSTRUCTION AND WILL BE RESET BY THAT SURVEYOR AFTER CONSTRUCTION.

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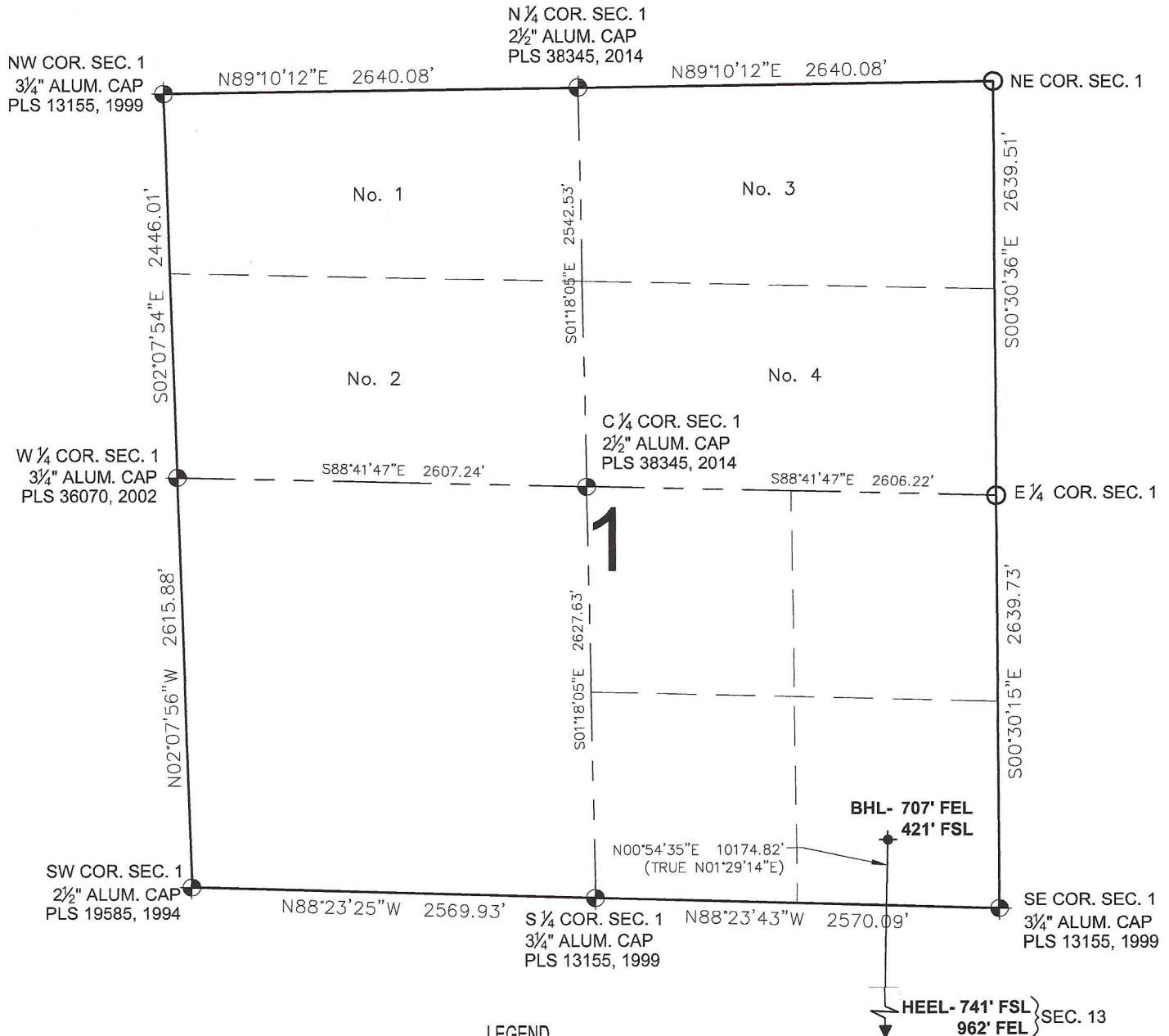
JACOB S. FRISCH, PLS 38149
DATE: 08-05-15
REV. DATE: 01-06-17
JOB NO: B14.APC.0459
FOR AND ON BEHALF OF P.F.S., LLC



SHEET 2 OF 3

PFS <small>Petroleum Field Services, LLC 7335 Hilleg Circle Denver, CO 80221</small>	FIELD DATE: 01-05-15	WELL NAME: SWARTZ 1N-12HZ	Anadarko <small>Petroleum Corporation</small>
	DRAWING DATE: 01-05-17	SURFACE LOCATION: SE 1/4 SE 1/4 SEC. 13 T2N, R65W, 6TH P.M.	
	BY: MDC	CHECKED BY: MLP	
WELD COUNTY, COLORADO			

SWARTZ 1N-12HZ WELL LOCATION CERTIFICATE



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JACOB S. FRISCH PLS 38149
DATE: 08-05-15
REV. DATE: 01-06-17
JOB NO: B14.APC.0489
FOR AND ON BEHALF OF P.F.S., LLC



SHEET 3 OF 3

PREPARED BY: 	FIELD DATE: 01-05-15	WELL NAME: SWARTZ 1N-12HZ	PREPARED FOR:
	DRAWING DATE: 01-05-17	SURFACE LOCATION: SE 1/4 SE 1/4 SEC. 13 T2N, R65W, 6TH P.M. WELD COUNTY, COLORADO	
BY: MDC		CHECKED BY: MLP	