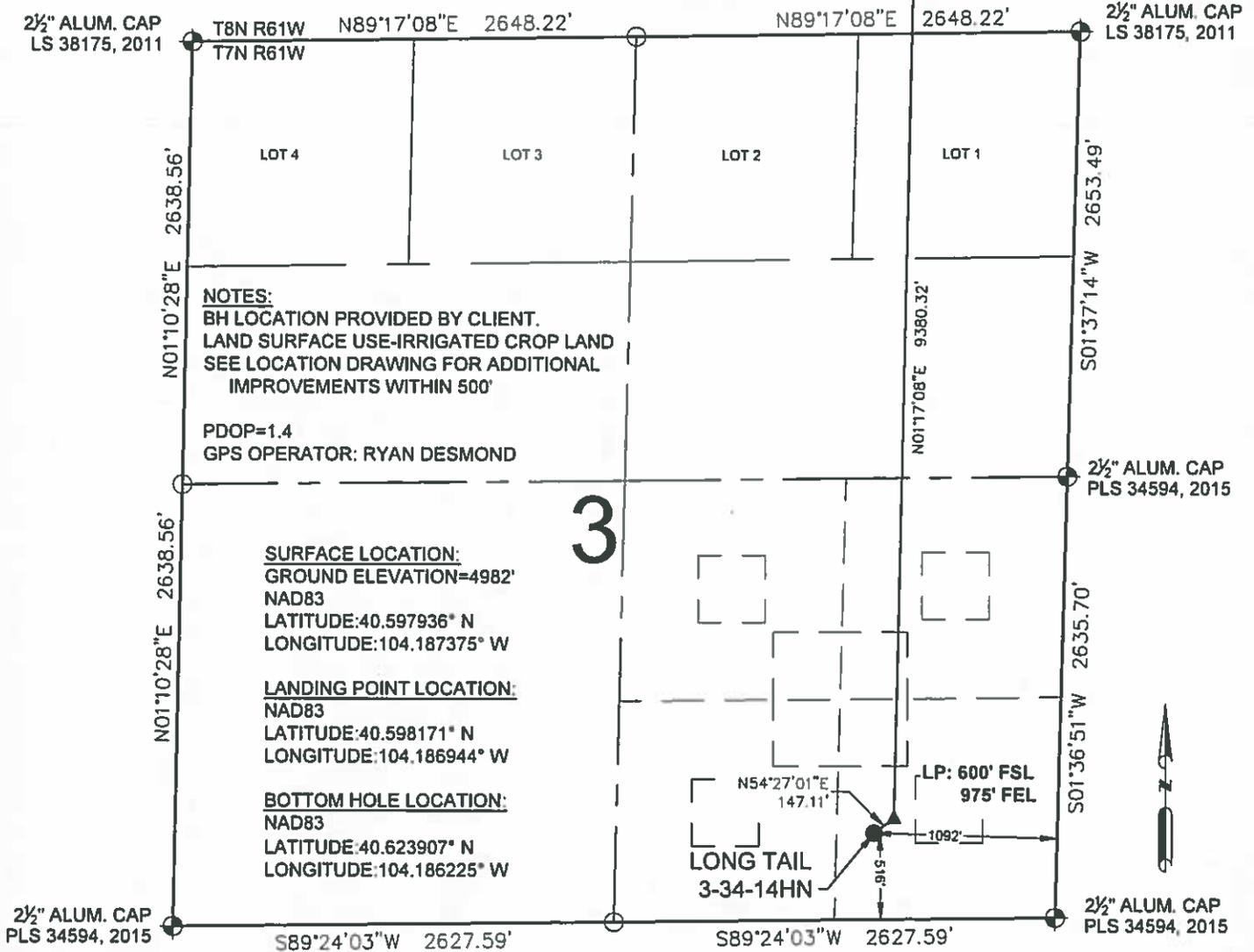


LONG TAIL 3-34-14HN WELL LOCATION EXHIBIT

BHL: 600' FNL } SEC. 34
975' FEL } T8N, R61W



NOTES:
BH LOCATION PROVIDED BY CLIENT.
LAND SURFACE USE-IRRIGATED CROP LAND
SEE LOCATION DRAWING FOR ADDITIONAL
IMPROVEMENTS WITHIN 500'

PDOP=1.4
GPS OPERATOR: RYAN DESMOND

SURFACE LOCATION:
GROUND ELEVATION=4982'
NAD83
LATITUDE:40.597936° N
LONGITUDE:104.187375° W

LANDING POINT LOCATION:
NAD83
LATITUDE:40.598171° N
LONGITUDE:104.186944° W

BOTTOM HOLE LOCATION:
NAD83
LATITUDE:40.623907° N
LONGITUDE:104.186225° W

3

N54°27'01"E
147.11'
LP: 600' FSL
975' FEL
1092'
LONG TAIL
3-34-14HN
516'

LEGEND

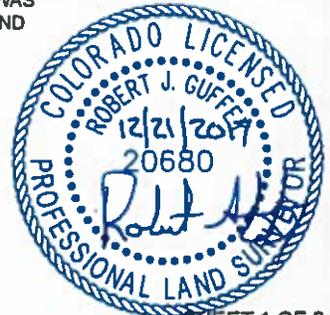
- ⊕ = EXISTING MONUMENT ⬆ = BOTTOM HOLE
- = CALCULATED POSITION ▲ = LANDING POINT
- = PROPOSED WELL LP = LANDING POINT
- ◆ = EXISTING WELL BHL = BOTTOM HOLE LOCATION

**WELL LONG TAIL 3-34-14HN TO BE
LOCATED 516' FSL & 1092' FEL**



- NOTES:**
- THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C O G C C, RULE NO. 215
 - ALL DISTANCES AND BEARINGS SHOWN HEREON ARE GROUND VALUES AS GPS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES. THIS LOW DISTORTION PROJECTION (LDP) IS BASED ON THE NORTH AMERICAN DATUM OF 1983, U.S. SURVEY FOOT WITH A LATITUDE ORIGIN OF 40 655085°N, A CENTRAL MERIDIAN LONGITUDE OF 104.096961°W, AND A SCALE FACTOR ON THE CENTRAL MERIDIAN OF 1.000232 (EXACT). THE LDP BASIS OF BEARINGS IS GEODETIC NORTH.
 - FIELD VERIFICATION OF MONUMENTS COMPLETED WITHIN 1 YEAR OF FIELD DATE, UNLESS OTHERWISE NOTED.

I, ROBERT J. GUFFEY, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE TO **MALLARD EXPLORATION** THAT THE SURVEY AND WELL LOCATION EXHIBIT SHOWN HEREON WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THE DRAWING SHOWN HEREON ACCURATELY DEPICTS THE PROPOSED LOCATION OF THE WELL. THIS EXHIBIT MEETS THE REQUIREMENTS OF A GIS LAND POSITION AS DEFINED BY SECTION 38-51-102 (7.5) C.R.S. AND AS SUCH PER SECTION 38-51-109.3 C.R.S. CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.



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.

ROBERT J. GUFFEY, PLS 20680
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF P.F.S., LLC

SHEET 1 OF 2

<p>2535 Hilltop Circle Denver, CO 80221 (303) 978-7128 www.ascntgeomatics.com</p>	FIELD DATE: 12-14-17	WELL NAME: LONG TAIL 3-34-14HN	
	DRAWING DATE: 12-15-17	SURFACE LOCATION: SE 1/4, SE 1/4, SEC. 3, T7N, R61W, 6TH P.M. WELD COUNTY, COLORADO	
BY: FWM	CHECKED: SMF	PREPARED FOR: 	

LONG TAIL 3-34-14HN WELL LOCATION EXHIBIT

2½" ALUM. CAP
CO 17492, 2011

N89°35'39"E 2644.08'

N89°35'39"E 2644.08'

2½" ALUM. CAP
PLS 20680, 2017

N01°01'48"E 2658.65'

BHL: 600' FNL
975' FEL

S00°56'57"W 2644.30'

34

N01°01'48"E 2658.65'

N01°17'08"E 9380.32'

S00°56'57"W 2644.30'

T8N R61W

2½" ALUM. CAP
LS 38175, 2011

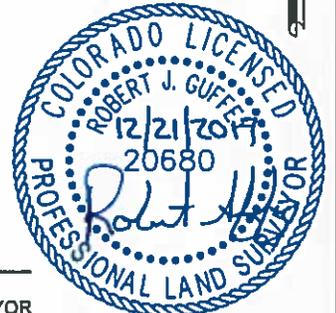
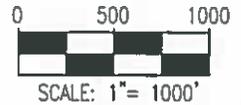
T7N R61W

S89°17'08"W 2648.22'

S89°17'08"W 2648.22'

2½" ALUM. CAP
LS 38175, 2011

LP: 600' FSL } SEC. 3
975' FEL } T7N, R61W



LEGEND

- ⊕ = EXISTING MONUMENT ✦ = BOTTOM HOLE
- = CALCULATED POSITION ▲ = LANDING POINT
- = PROPOSED WELL LP = LANDING POINT
- ◆ = EXISTING WELL BHL = BOTTOM HOLE LOCATION

ROBERT J. GUFFEY, PLS 20680
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF P.F.S., LLC

SHEET 2 OF 2

2535 Hilltop Circle
Denver, CO 80221
(303) 928-7128
www.ascntgeomatix.com

FIELD DATE: 12-14-17	WELL NAME: LONG TAIL 3-34-14HN
DRAWING DATE: 12-15-17	SURFACE LOCATION: SE 1/4, SE 1/4, SEC. 3, T7N, R61W, 6TH P.M. WELD COUNTY, COLORADO
BY: FWM	CHECKED: SMF

PREPARED FOR

MALLARD
EXPLORATION