

T3N, R66W

E. 1/16 COR.
SEC. 18 & SEC. 19, T3N, R66W
FOUND 2 1/2" ALUM. CAP
P.L.S. NO. 10855

NE. COR.
SEC. 19, T3N, R66W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 22098

N. 1/4 COR.
SEC. 19, T3N, R66W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 28650

N 87°50'35" E
1299.20' (M)

N 88°53'36" E
1319.54' (M)

N 88°22'11" E 2683.71' (M)

N 00°36'44" E 2626.88' (M)

MATCH LINE
SEE SHEET 2

NO. 2

NO. 1

NO. 05'41" W
2645.27' (M)

SURFACE LOCATION: NAD 83
GROUND ELEVATION= 4898.1'
LATITUDE= 40.207840°
LONGITUDE= -104.812955°
LATITUDE= 40°12'28.222"
LONGITUDE= -104°48'46.637"
HEEL LOCATION: NAD 83
LATITUDE= 40.204385°
LONGITUDE= -104.821866°
LATITUDE= 40°12'15.785"
LONGITUDE= -104°49'18.718"
BOTTOM HOLE LOCATION: NAD 83
LATITUDE= 40.205471°
LONGITUDE= -104.856411°
LATITUDE= 40°12'19.695"
LONGITUDE= -104°51'23.080"

CE. 1/16 COR.
SEC. 19, T3N, R66W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 34995

19

W. 1/4 COR.
SEC. 19, T3N, R66W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 13155

N 88°46'49" E
2715.70' (M)

N 88°46'36" E
1335.64' (M)

N 88°46'38" E
1335.73' (M)

E. 1/4 COR.
SEC. 19, T3N, R66W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 22098

HARRIS
FEDERAL 19-15HZ
SURFACE LOCATION

645'

1778'

NO. 2

NO. 1

NO. 00'32'35" W
2624.63' (M)

WELLBORE
CONTINUES INTO
SECTION 24
T3N, R67W

N 88°04'44" W 9657' GRID
N 87°38'06" W TRUE
S 84°18'16" W MAGNETIC

2290'

554'

HEEL LOCATION

SW. COR.
SEC. 19, T3N, R66W
FOUND 3 1/4" ALUM. CAP
P.L.S. NO. 13155

N 88°46'26" E 2769.95' (M)

S. 1/4 COR.
SEC. 19, T3N, R66W
FOUND 3 1/4" ALUM. CAP
ILLEGIBLE

N 88°45'30" E 2664.83' (M)

SE. COR.
SEC. 19, T3N, R66W
FOUND 2 1/2" ALUM. CAP
ILLEGIBLE

NO. 00'23'59" W 2623.86' (M)

NO. 00'38'27" E 2626.14' (M)

NOTES:

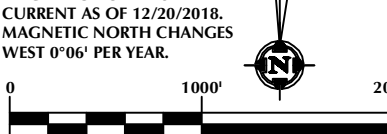
CERTIFICATE OF SURVEYOR:

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND TO THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATE DOES NOT REPRESENT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT AS DEFINED BY S.C.S. 051-302 AND CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.

WRANGLER GROHS
PROFESSIONAL LAND SURVEYOR
COLORADO REGISTRATION NUMBER 38603

NOTICE: ACCORDING TO COLORADO STATE 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 THE DATE ON THE CERTIFICATION SHOWN HEREON.

NOTE:
MAGNETIC NORTH IS
CURRENT AS OF 12/20/2018.
MAGNETIC NORTH CHANGES
WEST 0°06' PER YEAR.



SCALE: 1" = 1000'

WELL PAD - HARRIS FEDERAL 20-19HZ

**HARRIS FEDERAL 19-15HZ
WELL LOCATION CERTIFICATE
1778' FSL & 645' FEL NESE (SURFACE)
554' FSL & 2290' FWL LOT 1 (SESW) (HEEL)
LOCATED IN SECTION 19, T3N, R66W, 6TH P.M.
690' FSL & 2145' FEL SWSE (BOTTOM)
LOCATED IN SECTION 23, T3N, R67W, 6TH P.M.
WELD COUNTY, COLORADO**

**Kerr-McGee Oil &
Gas Onshore L.P.**
1099 18th Street
Denver, Colorado 80202



CONSULTING, LLC

SHERIDAN OFFICE
1095 Saberton Avenue
Sheridan, Wyoming 82801
Phone 307-674-0609

LOVELAND OFFICE
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Loveland, Colorado 80538
Phone 970-776-4331

DRAFTED BY: LMO	CHECKED BY: WJG	SHEET NO: 1 1 OF 3
DATE DRAFTED: 12/31/18	DATE SURVEYED: 12/20/18	
REVISED:	FILE NAME: 18-238	

T3N, R67W

NW. COR.
SEC. 24, T3N, R67W
FOUND 3 1/4" ALUM. CAP
W.C. 550' SOUTH OF TRUE
CORNER POSITION
L.S. NO. 22098

N. 1/4 COR.
SEC. 24, T3N, R67W
FOUND 2 1/2" ALUM. CAP
L.S. NO. 25385

E. 1/16 COR.
SEC. 13 & SEC. 24, T3N, R67W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 34995

NE. COR.
SEC. 24, T3N, R67W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 34995

N 88°25'48" W 2651.97' (M)

N 87°35'53" W 1355.15' (M)

N 87°59'16" W 1355.09' (M)

MATCH LINE
SEE SHEET 3

MATCH LINE
SEE SHEET 1

SURFACE LOCATION: NAD 83
GROUND ELEVATION= 4898.1'
LATITUDE= 40.207840°
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LATITUDE= 40°12'19.695"
LONGITUDE= -104°51'23.080"

N. 1/16 COR.
SEC. 23 & SEC. 24
T3N, R67W
FOUND 2 1/2"
ALUM. CAP
P.L.S. NO. 38512

NE. 1/16 COR.
SEC. 24, T3N, R67W
FOUND 3 1/4" ALUM. CAP
W.C. 3' SOUTH OF TRUE
CORNER POSITION
L.S. NO. 22098

W. 1/4 COR.
SEC. 24, T3N, R67W
FOUND 3 1/4"
ALUM. CAP W.C.
5' SOUTH OF
TRUE CORNER
POSITION
L.S. NO. 37041

CE. 1/16 COR.
SEC. 24, T3N, R67W
FOUND 2 1/2" ALUM. CAP
P.L.S. NO. 38512

E. 1/4 COR.
SEC. 24, T3N, R67W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 13155

N 87°58'34" W 2637.53' (C)

N 87°58'34" W 1326.85' (C)

N 87°58'55" W 1327.11' (M)

24

WELLBORE
CONTINUES
INTO
SECTION 23

S. 1/16 COR.
SEC. 23 & SEC. 24
T3N, R67W
FOUND 2" ALUM. CAP
ILLEGIBLE

SE. 1/16 COR.
SEC. 24, T3N, R67W
FOUND 2" ALUM. CAP
ILLEGIBLE

N 88°04'44" W 9657' GRID
N 87°38'06" W TRUE
S 84°18'16" W MAGNETIC

SW. COR.
SEC. 24, T3N, R67W
FOUND 2 1/2" ALUM. CAP
ILLEGIBLE

N 87°33'45" W 1298.99' (M)

N 87°34'09" W 1298.78' (M)

N 87°33'57" W 2597.77' (M)

W. 1/16 COR.
SEC. 24 & SEC. 25, T3N, R67W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 22098

S. 1/4 COR.
SEC. 24, T3N, R67W
FOUND 2 1/2" ALUM. CAP
P.L.S. NO. 38512

SE. COR.
SEC. 24, T3N, R67W
FOUND 3 1/4" ALUM. CAP
P.L.S. NO. 13155

CERTIFICATE OF SURVEYOR:

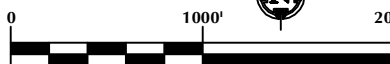
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Wrangler Grohs
38603
12/31/18
PROFESSIONAL LAND SURVEYOR

WRANGLER GROHS
PROFESSIONAL LAND SURVEYOR
COLORADO REGISTRATION NUMBER 38603

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NOTES:

- ▲ INDICATES SECTION CORNER.
- INDICATES CALCULATED CORNER.
- ELEVATION BASED ON NAVD88 (GEOID12B).
- BASIS OF BEARING DERIVED FROM COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE.
- ALL MEASURED DISTANCES ARE GRID.
COMBINED SCALE FACTOR: .99972938 CALCULATED FROM THE CENTER 1/4 CORNER OF SECTION 19, T3N, R66W.
- OPERATOR: TOBY OSBORN / PDOP = 1.4.
- SEE ADDENDUM TO WELL LOCATION CERTIFICATE FOR EXISTING IMPROVEMENTS WITHIN 500' OF THE WELL PAD.
- WELL FOOTAGES ARE MEASURED AT RIGHT ANGLES TO THE SECTION LINES.
- THE BOTTOM OF HOLE BEARS N88°04'44"W, 9657' FROM THE HEEL LOCATION.

WELL PAD - HARRIS FEDERAL 20-19HZ

HARRIS FEDERAL 19-15HZ
WELL LOCATION CERTIFICATE
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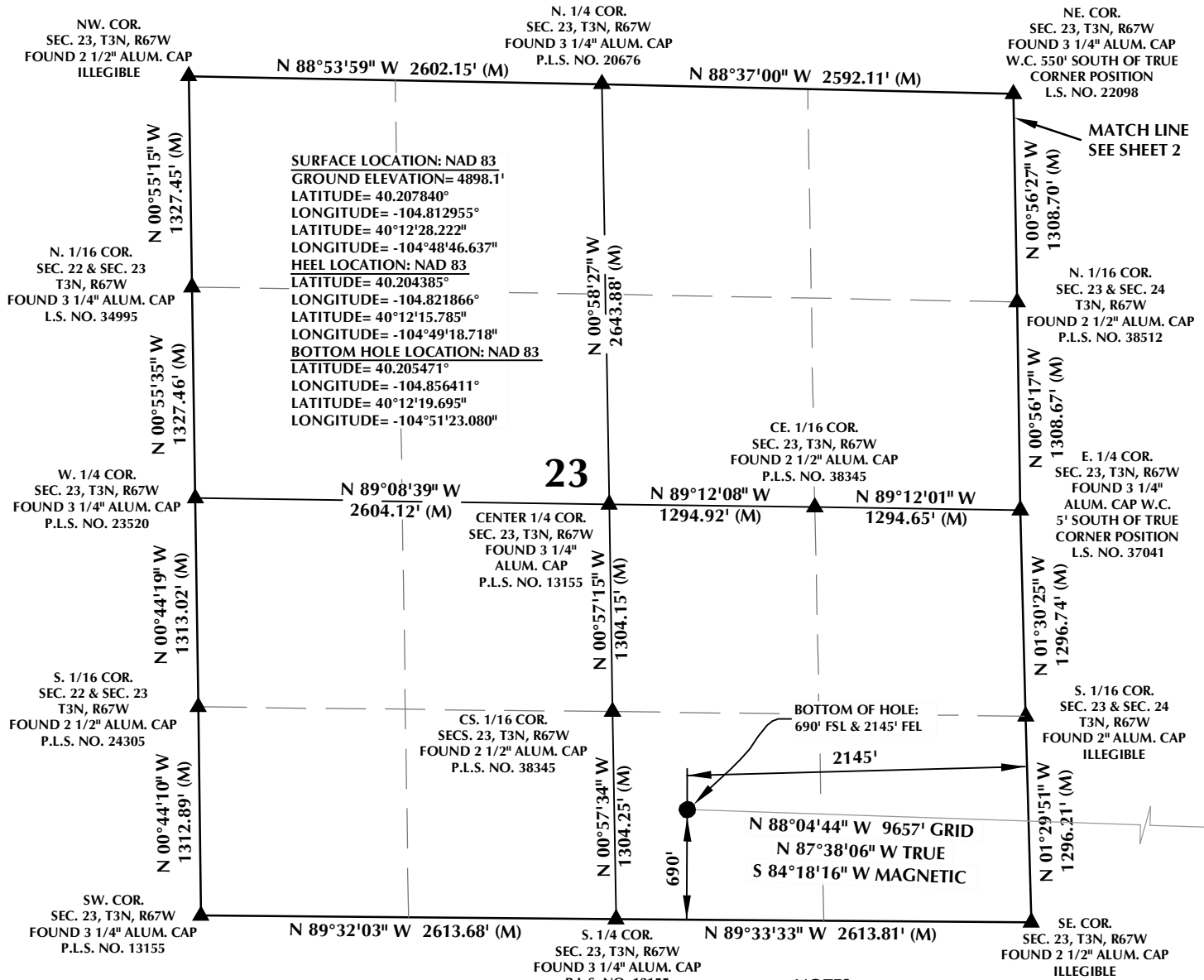
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T3N, R67W



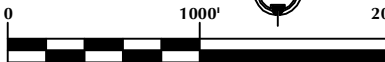
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Wrangler Grohs
 38603
 12/31/18
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 PROFESSIONAL LAND SURVEYOR
 COLORADO REGISTRATION NUMBER 38603

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