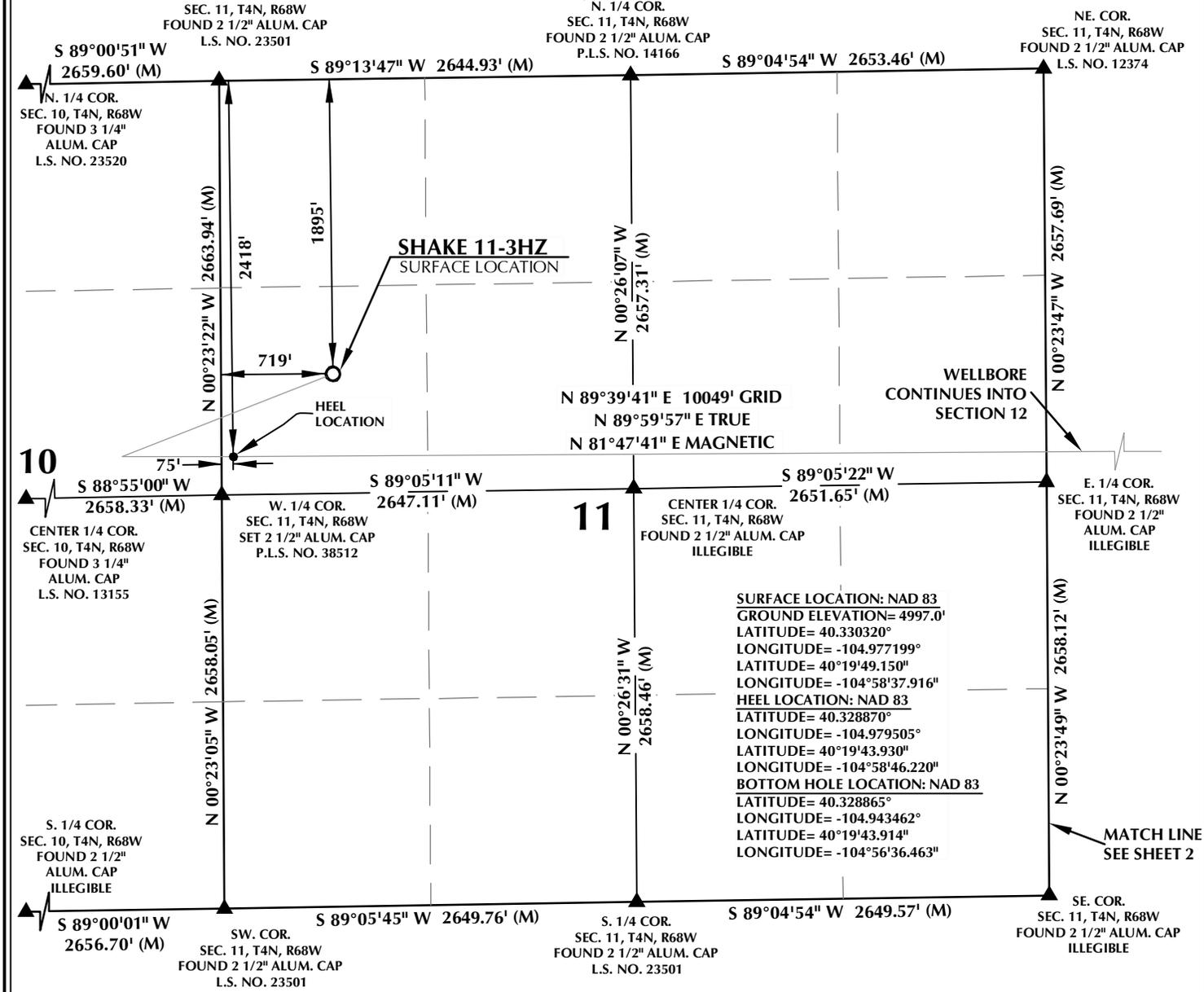


T4N, R68W



SURFACE LOCATION: NAD 83
 GROUND ELEVATION= 4997.0'
 LATITUDE= 40.330320°
 LONGITUDE= -104.977199°
 LATITUDE= 40°19'49.150"
 LONGITUDE= -104°58'37.916"
HEEL LOCATION: NAD 83
 LATITUDE= 40.328870°
 LONGITUDE= -104.979505°
 LATITUDE= 40°19'43.930"
 LONGITUDE= -104°58'46.220"
BOTTOM HOLE LOCATION: NAD 83
 LATITUDE= 40.328865°
 LONGITUDE= -104.943462°
 LATITUDE= 40°19'43.914"
 LONGITUDE= -104°56'36.463"

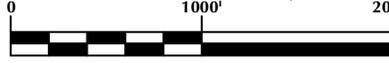
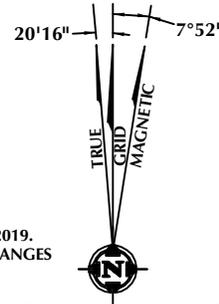
CERTIFICATE OF SURVEYOR:

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE 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 C.S. 38-5-102 AND CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.

Randall K. French
 RANDALL K. FRENCH
 PROFESSIONAL LAND SURVEYOR
 COLORADO REGISTRATION NUMBER 38512
 3/5/19

NOTICE: ACCORDING TO COLORADO STATE LAW YOU MUST TAKE 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 1/30/2019. MAGNETIC NORTH CHANGES WEST 0°06' PER YEAR.



SCALE: 1" = 1000'

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: .99972262 CALCULATED FROM THE N. 1/4 CORNER OF SECTION 11, T4N, R68W. OPERATOR: JEREMY GROVES / 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 N89°39'41"E, 10049' FROM THE HEEL LOCATION.

WELL PAD - S&B 5-11HZ

SHAKE 11-3HZ
 WELL LOCATION CERTIFICATE
 1895' FNL & 719' FWL SWNW (SURFACE)
 2418' FNL & 75' FWL SWNW (HEEL)
 LOCATED IN SECTION 11
 2489' FNL & 475' FEL SENE (BOTTOM)
 LOCATED IN SECTION 12
 T4N, R68W, 6TH P.M.
 WELD COUNTY, COLORADO

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



CONSULTING, LLC

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

LOVELAND OFFICE
 6706 North Franklin Avenue
 Loveland, Colorado 80538
 Phone 970-776-4331

DRAFTED BY: LMO	CHECKED BY: RKF	SHEET NO: 1 1 OF 2
DATE DRAFTED: 3/5/19	DATE SURVEYED: 1/30/19	
REVISED:	FILE NAME: 18-209	

T4N, R68W

N. 1/4 COR.
SEC. 12, T4N, R68W
FOUND 2 1/2" ALUM. CAP
L.S. NO. 12374

NE. COR.
SEC. 12, T4N, R68W
FOUND 2" ALUM. CAP
L.S. NO. 23500

NW. COR.
SEC. 12, T4N, R68W
FOUND 2 1/2" ALUM. CAP
L.S. NO. 12374

MATCH LINE
SEE SHEET 1

S 89°21'17" W 2647.96' (M)

S 89°22'41" W 2651.76' (M)

N 00°23'47" W 2657.69' (M)

N 00°25'09" W 2663.75' (M)

2489'

N 00°25'12" W 2656.90' (M)

N 89°39'41" E 10049' GRID
N 89°59'57" E TRUE
N 81°47'41" E MAGNETIC

BOTTOM OF HOLE:
2489' FNL & 475' FEL

475'

12

E. 1/4 COR.
SEC. 12, T4N, R68W
FOUND 2 1/2" ALUM. CAP W.C.
95' WEST OF TRUE CORNER POSITION
L.S. NO. 38175

W. 1/4 COR.
SEC. 12, T4N, R68W
FOUND 2 1/2" ALUM. CAP
ILLEGIBLE

S 89°29'09" W 2649.00' (M)

CENTER 1/4 COR.
SEC. 12, T4N, R68W
FOUND 2 1/2" ALUM. CAP
ILLEGIBLE

S 89°13'48" W 2651.83' (M)

SURFACE LOCATION: NAD 83
GROUND ELEVATION= 4997.0'
LATITUDE= 40.330320°
LONGITUDE= -104.977199°
LATITUDE= 40°19'49.150"
LONGITUDE= -104°58'37.916"
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LATITUDE= 40°19'43.914"
LONGITUDE= -104°56'36.463"

N 00°25'10" W 2655.65' (M)

N 00°22'57" W 1332.46' (M)

S. 1/16 COR.
SEC. 7, T4N, R67W &
SEC. 12, T4N, R68W
FOUND 3 1/4" ALUM. CAP
L.S. NO. 22098

SW. COR.
SEC. 12, T4N, R68W
FOUND 2 1/2" ALUM. CAP
ILLEGIBLE

S 89°25'57" W 2650.01' (M)

S. 1/4 COR.
SEC. 12, T4N, R68W
FOUND 2 1/2" ALUM. CAP
ILLEGIBLE

S 89°25'39" W 2650.14' (M)

N 00°23'01" W 1332.33' (M)

SE. COR.
SEC. 12, T4N, R68W
SET 2 1/2" ALUM. CAP
P.L.S. NO. 38512

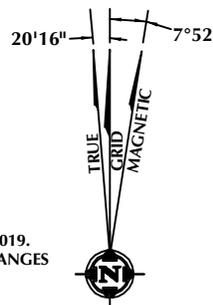
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Randall K. French
38512
PROFESSIONAL LAND SURVEYOR
3/5/19
RANDALL K. FRENCH
PROFESSIONAL LAND SURVEYOR
COLORADO REGISTRATION NUMBER 38512

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NOTE:
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CURRENT AS OF 1/30/2019.
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WEST 0°06' PER YEAR.



SCALE: 1" = 1000'

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SHAKE 11-3HZ
WELL LOCATION CERTIFICATE
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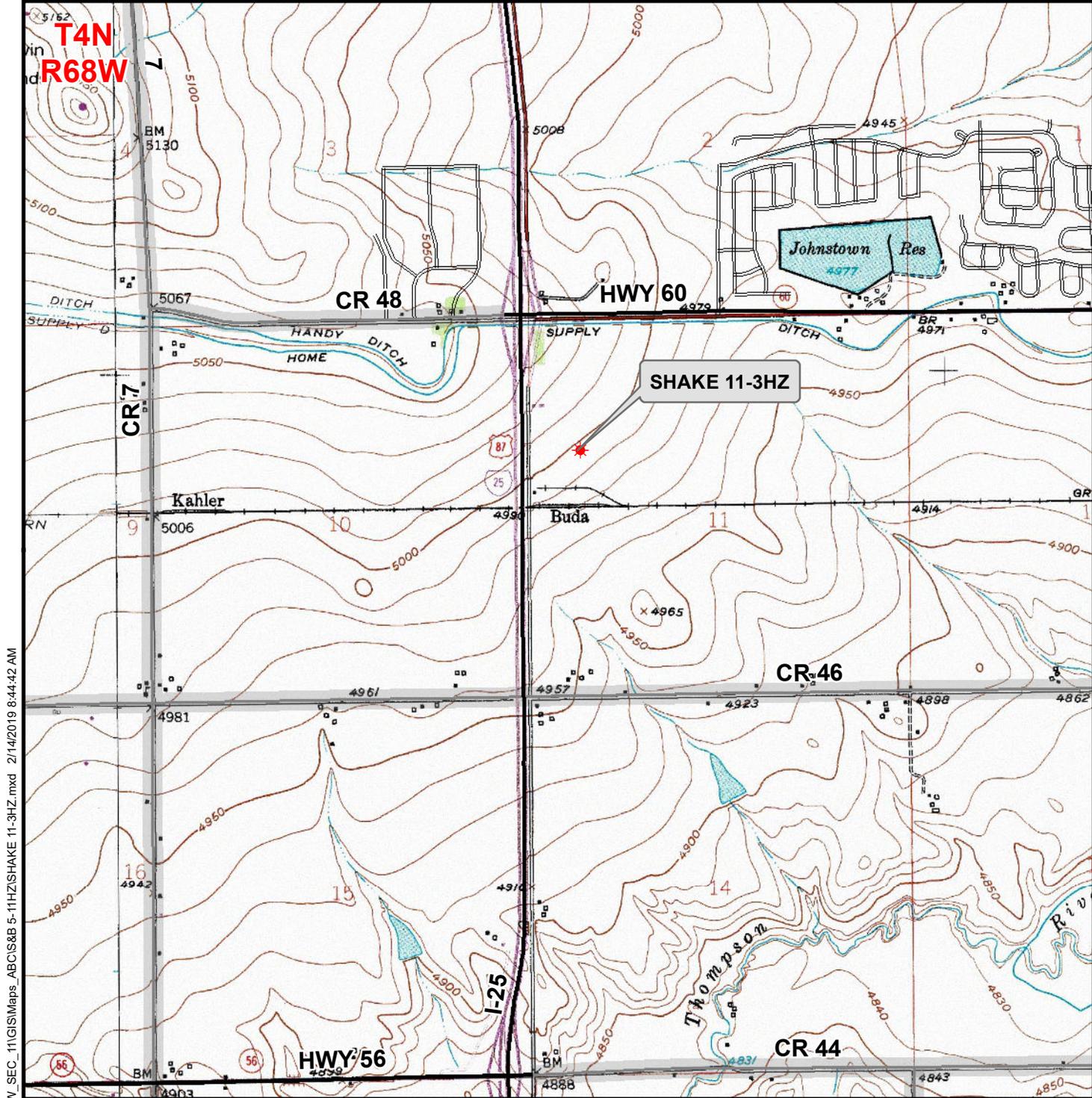


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DRAFTED BY:	LMO	CHECKED BY:	RKF	SHEET NO:
DATE DRAFTED:	3/5/19	DATE SURVEYED:	1/30/19	2
REVISED:		FILE NAME:	18-209	2 OF 2



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Legend

- ★ Well - Proposed
- ==== Road - Primitive - Existing
- Road - County - Existing
- Road - Improved - Existing
- Road - Highway - Existing

WELL PAD - S&B 5-11HZ
GENERAL LOCATION MAP
SHAKE 11-3HZ
LOCATED IN SECTION 11
T4N, R68W, 6th P.M.
WELD COUNTY, COLORADO

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SCALE: 1" = 2,000ft	NAD83 CO-Nft
DRAWN: DP	DATE: 15 Feb 2019
REVISED:	DATE: