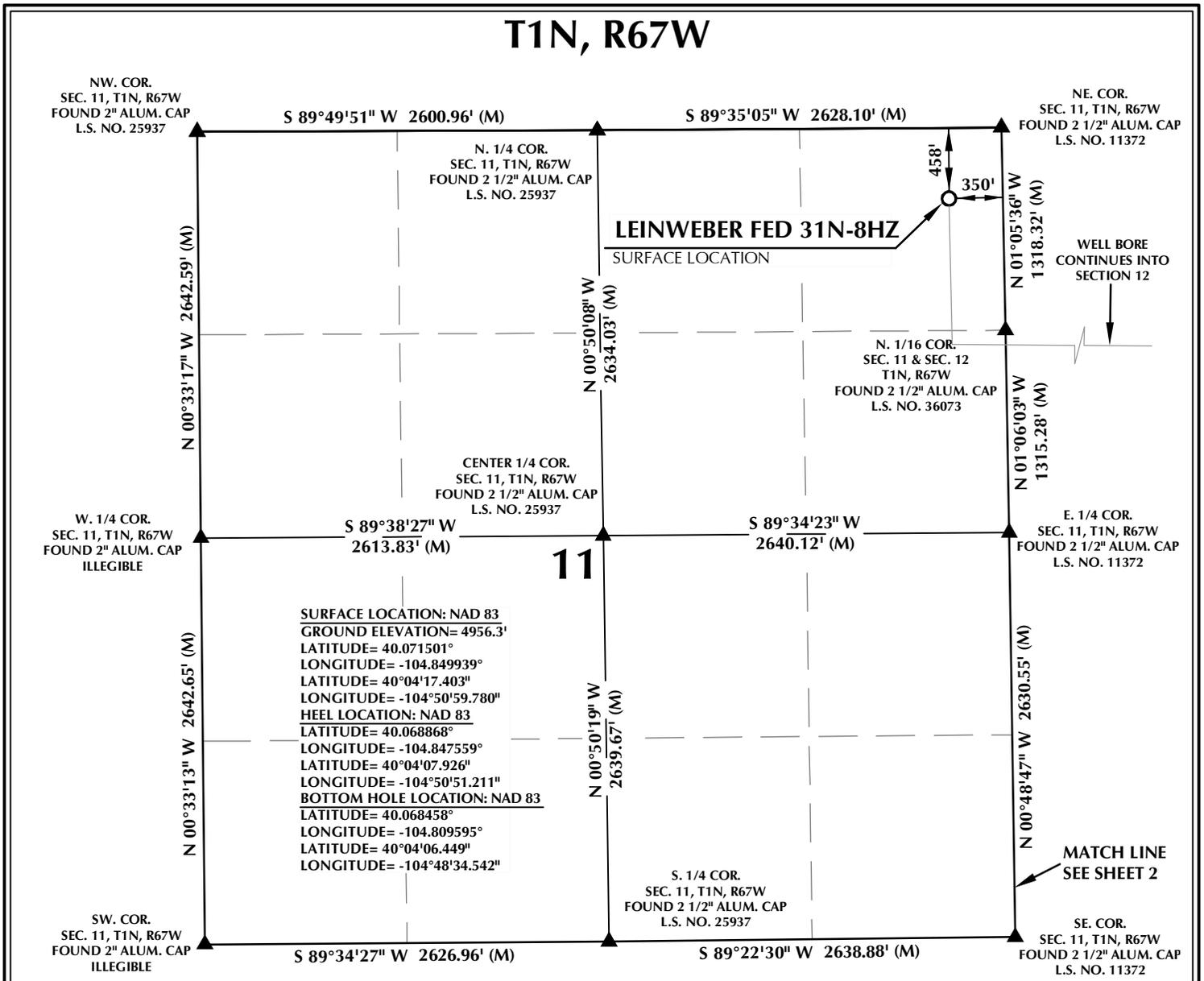


# T1N, R67W

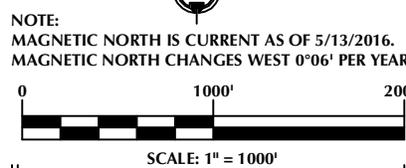
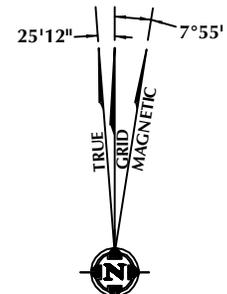


## CERTIFICATE OF SURVEYOR:

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*Randall K. French*  
**PROFESSIONAL LAND SURVEYOR**  
 COLORADO REGISTRATION NUMBER 18512  
 6/27/16

**NOTE:**  
 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.



## NOTES:

- ▲ INDICATES SECTION CORNER
- INDICATES CALCULATED CORNER
- ELEVATION BASED ON NAVD88 (GEOID12B)
- BASIS OF BEARING DERIVED FROM COLORADO COORDINATE SYSTEM 1983 NORTH ZONE.
- ALL MEASURED DISTANCES ARE GRID.
- COMBINED SCALE FACTOR: .99972422 CALCULATED FROM THE NW. CORNER OF SECTION 11, T1N, R67W
- OPERATOR: ROB WILSON / PDOP = 1.6
- 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 S89°37'41"E, 10626' FROM THE HEEL LOCATION.

## WELL PAD - LEINWEBER FED 31N-8HZ

LEINWEBER FED 31N-8HZ  
 WELL LOCATION CERTIFICATE  
 458' FNL & 350' FEL NENE (SURFACE)  
 LOCATED IN SECTION 11  
 1416' FNL & 305' FWL SWNW (HEEL)  
 LOCATED IN SECTION 12  
 T1N, R67W, 6TH P.M.  
 1644' FNL & 249' FWL SWNW (BOTTOM)  
 LOCATED IN SECTION 8  
 T1N, R66W, 6TH P.M.  
 WELD COUNTY, COLORADO

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

**609 CONSULTING, LLC**

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 Phone 307-674-0609

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 Loveland, Colorado 80538  
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DRAFTED BY: LMO	CHECKED BY: RKF	SHEET NO: <b>1</b> 1 OF 4
DATE DRAFTED: 6/27/16	DATE SURVEYED: 4/25/16	
REVISED:	FILE NAME: 16-33	

K:\ADARKO\2016\16\_33\_LEINWEBER\_FED\_31N-8HZ\LEINWEBER\_FED\_31N-8HZ\_P1AT.dwg, 6/29/2016 10:45:21 AM, lsb

# T1N, R67W

N. 1/4 COR.  
SEC. 12, T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 11372

NE. COR.  
SEC. 12, T1N, R67W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 13155

NW. COR.  
SEC. 12, T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 11372

N. 1/16 COR.  
SEC. 11 & SEC. 12  
T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 36073

NW. 1/16 COR. 1312.22' (M)  
SEC. 12, T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
P.L.S. NO. 38046

CN. 1/16 COR.  
SEC. 12, T1N, R67W  
FOUND 2" ALUM. CAP  
L.S. NO. 11372

W. 1/4 COR.  
SEC. 12, T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 11372

CW. 1/16 COR.  
SEC. 12, T1N, R67W  
FOUND 2" ALUM. CAP  
WITNESS COR. 10' NORTH OF  
CORNER POSITION  
L.S. NO. 11372

CENTER 1/4 COR.  
SEC. 12, T1N, R67W  
SET 2 1/2" ALUM. CAP  
P.L.S. NO. 38512

**12**

SURFACE LOCATION: NAD 83  
GROUND ELEVATION= 4956.3'  
LATITUDE= 40.071501°  
LONGITUDE= -104.849939°  
LATITUDE= 40°04'17.403"  
LONGITUDE= -104°50'59.780"  
HEEL LOCATION: NAD 83  
LATITUDE= 40.068868°  
LONGITUDE= -104.847559°  
LATITUDE= 40°04'07.926"  
LONGITUDE= -104°50'51.211"  
BOTTOM HOLE LOCATION: NAD 83  
LATITUDE= 40.068458°  
LONGITUDE= -104.809595°  
LATITUDE= 40°04'06.449"  
LONGITUDE= -104°48'34.542"

WELL BORE  
CONTINUES INTO  
SECTION 7, T1N, R66W

E. 1/4 COR.  
SEC. 12, T1N, R67W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 13155

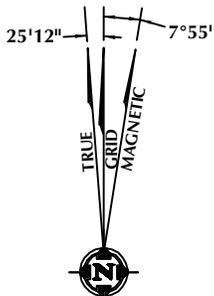
MATCH LINE  
SEE SHEET 1

MATCH LINE  
SEE SHEET 3

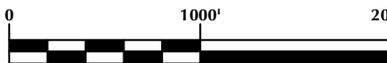
SW. COR.  
SEC. 12, T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 11372

S. 1/4 COR.  
SEC. 12, T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
ILLEGIBLE

SE. COR.  
SEC. 12, T1N, R67W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 11372



NOTE:  
MAGNETIC NORTH IS CURRENT AS OF 5/13/2016.  
MAGNETIC NORTH CHANGES WEST 0°06' PER YEAR.



SCALE: 1" = 1000'

## CERTIFICATE OF SURVEYOR:

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*Randall K. French*  
PROFESSIONAL LAND SURVEYOR  
627/16

RANDALL K. FRENCH  
PROFESSIONAL LAND SURVEYOR  
COLORADO REGISTRATION NUMBER 38512

NOTICE:  
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## NOTES:

- ▲ INDICATES SECTION CORNER
- INDICATES CALCULATED CORNER
- ELEVATION BASED ON NAVD88 (GEOID12B)
- BASIS OF BEARING DERIVED FROM COLORADO COORDINATE SYSTEM 1983 NORTH ZONE.
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- COMBINED SCALE FACTOR: .99972422 CALCULATED FROM THE NW. CORNER OF SECTION 11, T1N, R67W
- OPERATOR: ROB WILSON / PDOP = 1.6
- 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 S89°37'41"E, 10626' FROM THE HEEL LOCATION.

## WELL PAD - LEINWEBER FED 31N-8HZ

LEINWEBER FED 31N-8HZ  
WELL LOCATION CERTIFICATE  
458' FNL & 350' FEL NENE (SURFACE)  
LOCATED IN SECTION 11  
1416' FNL & 305' FWL SWNW (HEEL)  
LOCATED IN SECTION 12  
T1N, R67W, 6TH P.M.  
1644' FNL & 249' FWL SWNW (BOTTOM)  
LOCATED IN SECTION 8  
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WELD COUNTY, COLORADO

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DATE DRAFTED:	6/27/16	DATE SURVEYED:	4/25/16	<b>2</b>
REVISED:		FILE NAME:	16-33	2 OF 4

# T1N, R66W

E. 1/16 COR.  
SEC. 6 & SEC. 7, T1N, R66W  
FOUND 2<sup>nd</sup> ALUM. CAP  
L.S. NO. 25937

NW. COR.  
SEC. 7, T1N, R66W  
FOUND 3 1/4<sup>th</sup> ALUM. CAP  
L.S. NO. 13155

S 87°42'42" W 2789.45' (M)

S 89°45'52" W  
1318.81' (M)

S 89°41'56" W  
1320.11' (M)

NE. COR.  
SEC. 7, T1N, R66W  
FOUND 2<sup>nd</sup> ALUM. CAP  
L.S. NO. 30830

N. 1/4 COR.  
SEC. 7, T1N, R66W  
SET 2 1/2<sup>nd</sup> ALUM. CAP  
P.L.S. NO. 38512

N 00°54'42" W 2638.38' (M)

N 00°42'53" W  
2687.95' (M)

S 89°37'41" E 10626' GRID  
S 89°12'29" E TRUE  
N 82°27'19" E MAGNETIC

N 00°33'37" W 2639.50' (M)

WELL BORE  
CONTINUES INTO  
SECTION 8

CENTER 1/4 COR.  
SEC. 7, T1N, R66W  
FOUND 2<sup>nd</sup> ALUM. CAP  
L.S. NO. 25937

S 88°40'40" W  
2631.87' (M)

E. 1/4 COR.  
SEC. 7, T1N, R66W  
FOUND 2 1/2<sup>nd</sup> ALUM. CAP  
L.S. NO. 30830

W. 1/4 COR.  
SEC. 7, T1N, R66W  
FOUND 3 1/4<sup>th</sup> ALUM. CAP  
L.S. NO. 13155

S 88°43'42" W  
2779.47' (M)

**SURFACE LOCATION: NAD 83**  
GROUND ELEVATION= 4956.3'  
LATITUDE= 40.071501°  
LONGITUDE= -104.849939°  
LATITUDE= 40°04'17.403"  
LONGITUDE= -104°50'59.780"  
**HEEL LOCATION: NAD 83**  
LATITUDE= 40.068868°  
LONGITUDE= -104.847559°  
LATITUDE= 40°04'07.926"  
LONGITUDE= -104°50'51.211"  
**BOTTOM HOLE LOCATION: NAD 83**  
LATITUDE= 40.068458°  
LONGITUDE= -104.809595°  
LATITUDE= 40°04'06.449"  
LONGITUDE= -104°48'34.542"

N 00°33'46" W 2639.58' (M)

MATCH LINE  
SEE SHEET 4

MATCH LINE  
SEE SHEET 2

N 00°41'02" W 2614.03' (M)

N 00°30'31" W  
2621.35' (M)

S. 1/4 COR.  
SEC. 7, T1N, R66W  
FOUND 2<sup>nd</sup> ALUM. CAP  
L.S. NO. 25937

E. 1/16 COR.  
SEC. 7 & SEC. 18, T1N, R66W  
FOUND 2<sup>nd</sup> ALUM. CAP  
L.S. NO. 25937

SW. COR.  
SEC. 7, T1N, R66W  
FOUND 2 1/2<sup>nd</sup> ALUM. CAP  
L.S. NO. 11372

S 88°52'40" W 2771.39' (M)

S 89°04'50" W  
1317.00' (M)

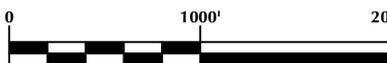
S 89°04'10" W  
1317.17' (M)

SE. COR.  
SEC. 7, T1N, R66W  
FOUND 3 1/4<sup>th</sup> ALUM. CAP  
L.S. NO. 25942

25'12" 7°55'



NOTE:  
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- WELL FOOTAGES ARE MEASURED AT RIGHT ANGLES TO THE SECTION LINES.
- NO. 1 & NO. 2 AS SHOWN HEREON ARE GOVERNMENT LOTS 1 & 2 OF THE ORIGINAL GLO SURVEY.
- THE BOTTOM OF HOLE BEARS S89°37'41"E, 10626' FROM THE HEEL LOCATION.

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6/27/16

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WELD COUNTY, COLORADO

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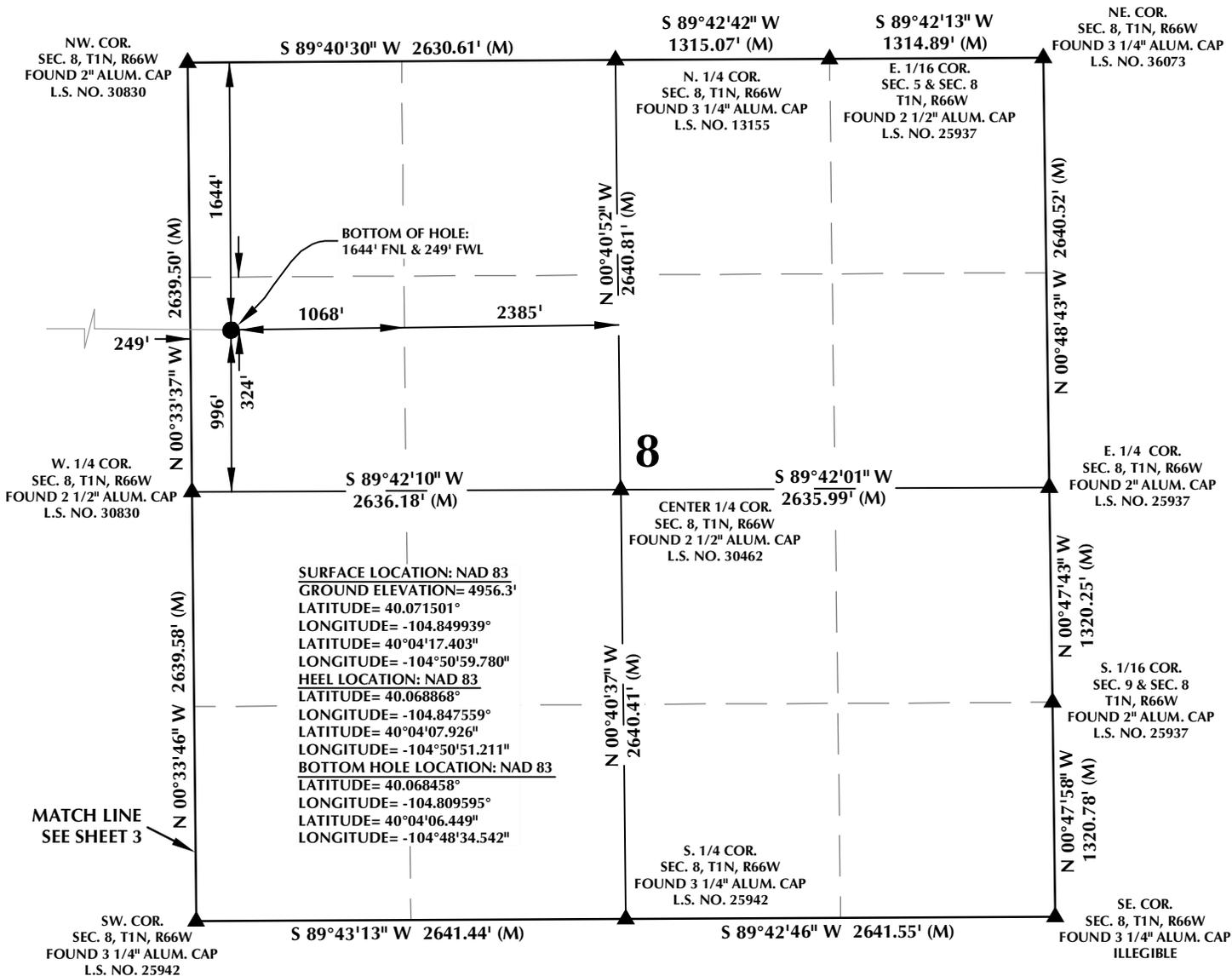
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DATE DRAFTED:	6/27/16	DATE SURVEYED:	4/25/16	
REVISED:		FILE NAME:	16-33	

# T1N, R66W

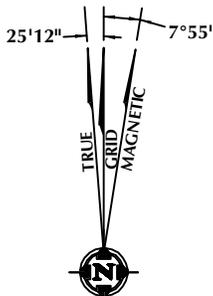


## CERTIFICATE OF SURVEYOR:

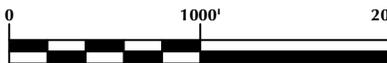
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**RANDALL K. FRENCH**  
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