

API NUMBER: 093 25278

OKLAHOMA CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
P.O. BOX 52000
OKLAHOMA CITY, OK 73152-2000
(Rule 165:10-3-1)

Approval Date: 06/06/2022
Expiration Date: 12/06/2023

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 34 Township: 20N Range: 15W County: MAJOR

SPOT LOCATION: ☐ NE ☐ NW ☐ NW ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 215 2215

Lease Name: BROMLOW Well No: 2015 3-34H Well will be 215 feet from nearest unit or lease boundary.

Operator Name: SANDRIDGE EXPLORATION & PRODUCTION Telephone: 8177063891 OTC/OCC Number: 22281 0

SANDRIDGE EXPLORATION & PRODUCTION LLC
1 E SHERIDAN AVE #500
OKLAHOMA CITY, OK 73104-2496

QUINCY BROMLOW AND STARLA BROMLOW
PO BOX 781
SEILING OK 73663

Formation(s) (Permit Valid for Listed Formations Only):

Name	Code	Depth
1 MISSISSIPPIAN	359MSSP	8304

Spacing Orders: 634399

Location Exception Orders: No Exceptions

Increased Density Orders: No Density

Pending CD Numbers: 202201402

Working interest owners' notified: ***

Special Orders: No Special

202201401

Total Depth: 14150 Ground Elevation: 1699

Surface Casing: 600

Depth to base of Treatable Water-Bearing FM: 350

Under Federal Jurisdiction: Yes
Fresh Water Supply Well Drilled: No
Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 22-38332

H. (Other) SEE MEMO

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 Average: 5000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is: AP/TE DEPOSIT

Pit Location Formation: TERRACE

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED

Chlorides Max: 300000 Average: 200000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is: AP/TE DEPOSIT

Pit Location Formation: TERRACE

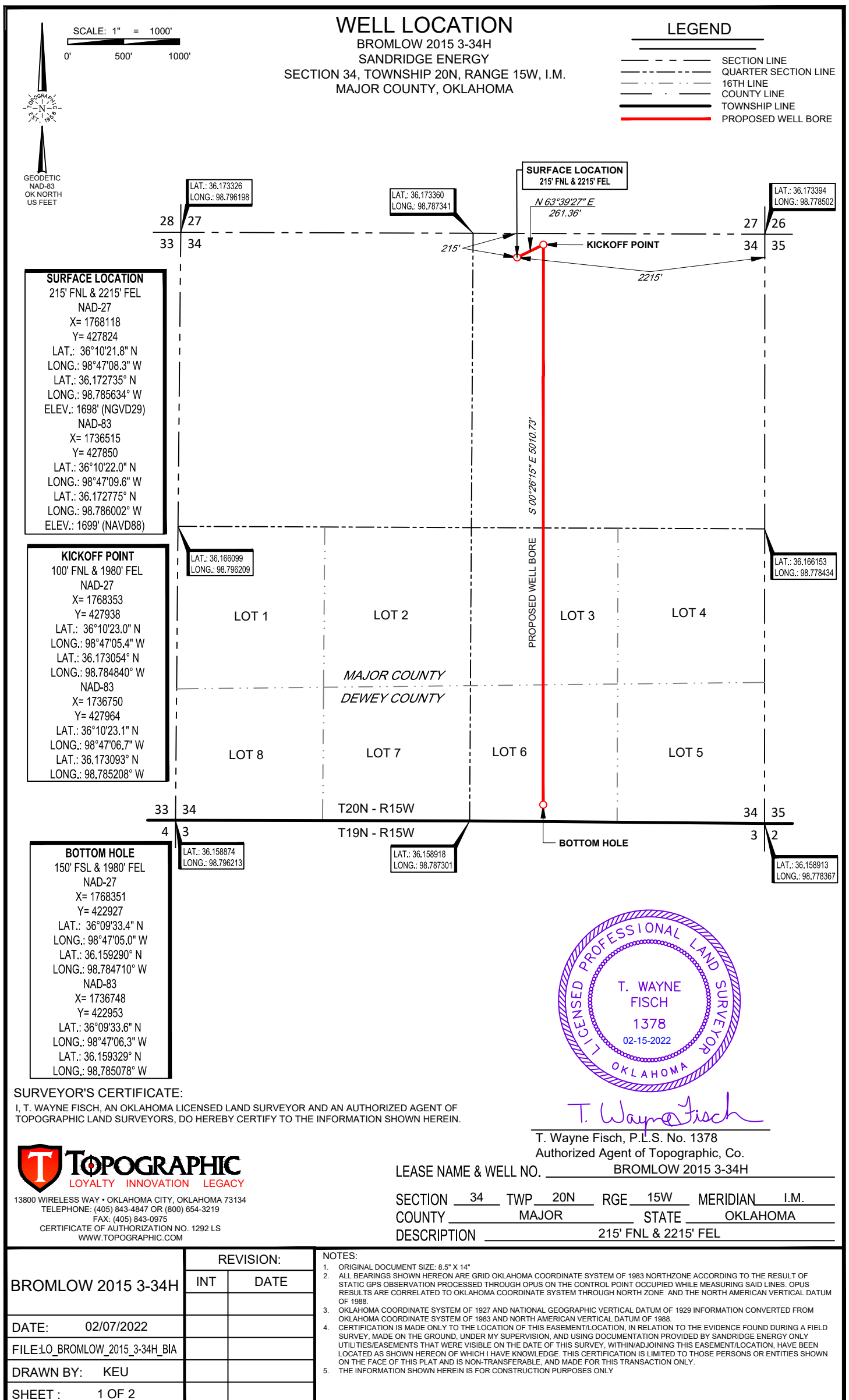
This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 MONTHS, except as otherwise provided by Rule 165: 10-3-1. Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

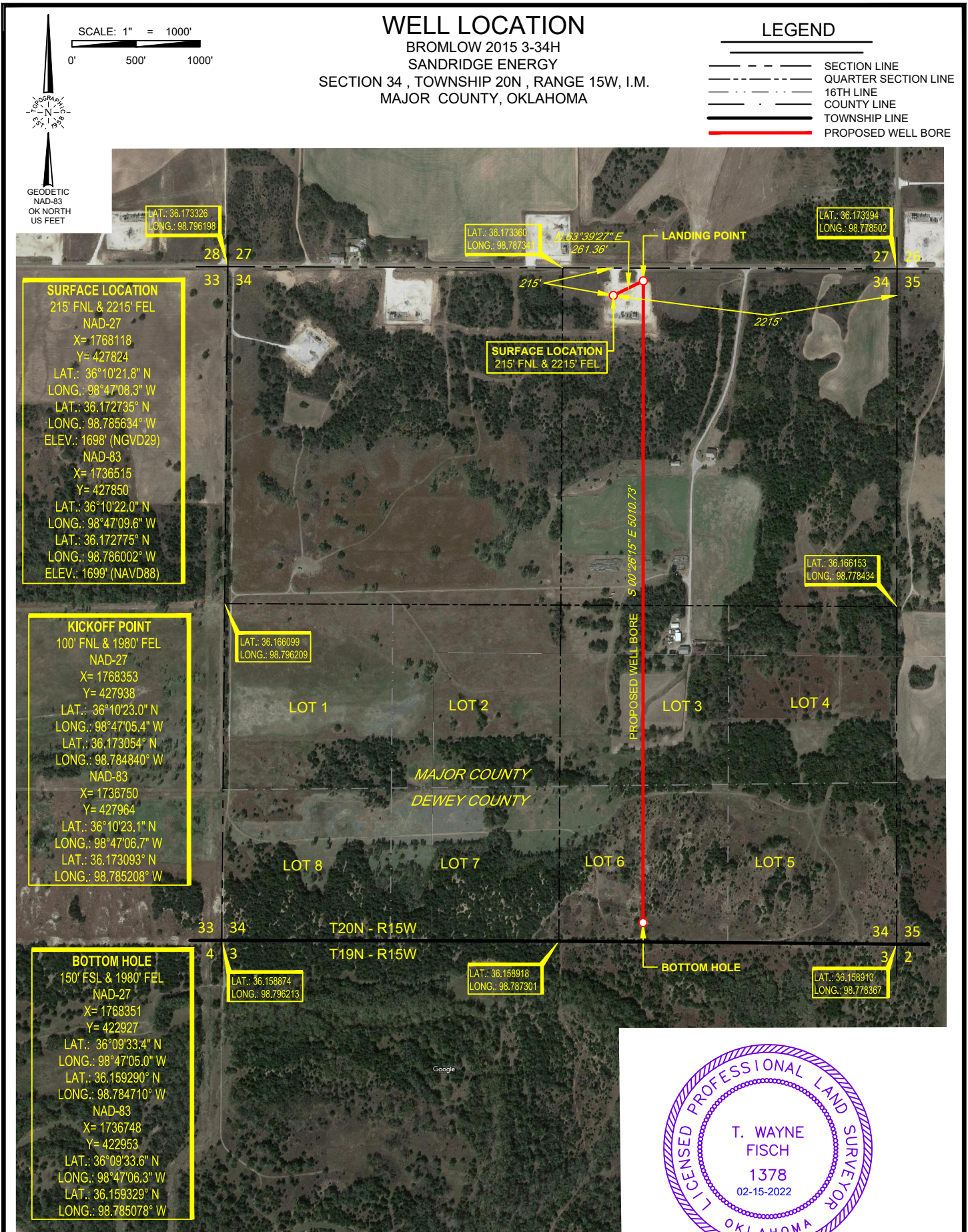
HORIZONTAL HOLE 1

Section: 34	Township: 20N	Range: 15W	Meridian: IM	Total Length: 4846
	County: DEWEY			Measured Total Depth: 14150
Spot Location of End Point: S2	S2	SW	SE	True Vertical Depth: 9385
Feet From: SOUTH		1/4 Section Line: 150		End Point Location from
Feet From: EAST		1/4 Section Line: 1980		Lease, Unit, or Property Line: 150

NOTES:

Category	Description
HYDRAULIC FRACTURING	[5/19/2022 - GC2] - OCC 165:10-3-10 REQUIRES: 1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN; 2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND, 3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG
INTERMEDIATE CASING	[5/19/2022 - GC2] - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES
MEMO	[5/19/2022 - GC2] - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 202201401	[6/6/2022 - GB1] - 34-20N-15W X634339 MSSP 1 WELL NO OP NAMED REC 5/10/2 (HUBER)
PENDING CD - 202201402	[6/6/2022 - GB1] - (I.O.) 34-20N-15W X634339 MSSP COMPL INT NCT 165' FNL, NCT 165' FSL, NCT 1320' FEL NO OP NAMED REC 5/10/22 (HUBER)
SPACING - 634339	[6/6/2022 - GB1] - (640)(HOR) 34-20N-15W VAC OTHERS VAC 574435/578073 MSSLM, OTHER S2 NW4 & NE4 & SE4 & SW4 VAC 132900 CSTR S2 NW4 & NE4 & SE4 & SW4 EST (REG) OTHER EXT (REG) OTHERS EST (HOR) MSSP, OTHERS POE TO BHL (MSSP) NCT 660' FB (COEXIST WITH SP. ORDER 574435/578073 MSSLM N2 NW4 & COEXIST WITH SP. ORDER 132900 CSTR N2 NW4)





SURVEYOR'S CERTIFICATE:
I, T. WAYNE FISCH, AN OKLAHOMA LICENSED LAND SURVEYOR AND AN AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, DO HEREBY CERTIFY TO THE INFORMATION SHOWN HEREIN.

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
13800 WIRELESS WAY • OKLAHOMA CITY, OKLAHOMA 73134
TELEPHONE: (405) 843-4847 OR (800) 654-3219
FAX: (405) 843-0975
CERTIFICATE OF AUTHORIZATION NO. 1292 LS
WWW.TOPOGRAPHIC.COM

T. Wayne Fisch, P.L.S. No. 1378
Authorized Agent of Topographic, Co.
BROMLOW 2015 3-34H

LEASE NAME & WELL NO. _____
SECTION 34 TWP 20N RGE 15W MERIDIAN I.M.
COUNTY MAJOR STATE OKLAHOMA
DESCRIPTION 215' FNL & 2215' FEL

BROMLOW 2015 3-34H	REVISION:	
	INT	DATE
DATE: 02/07/2022		
FILE:LO_BROMLOW_2015_3-34H_BIA		
DRAWN BY: KEU		
SHEET : 2 OF 2		

- NOTES:**
1. ORIGINAL DOCUMENT SIZE: 8.5" X 14"
 2. ALL BEARINGS SHOWN HEREON ARE GRID OKLAHOMA COORDINATE SYSTEM OF 1983 NORTH ZONE ACCORDING TO THE RESULT OF STATIC GPS OBSERVATION PROCESSED THROUGH OPUS ON THE CONTROL POINT OCCUPIED WHILE MEASURING SAID LINES. OPUS RESULTS ARE CORRELATED TO OKLAHOMA COORDINATE SYSTEM THROUGH NORTH ZONE AND THE NORTH AMERICAN VERTICAL DATUM OF 1988.
 3. OKLAHOMA COORDINATE SYSTEM OF 1927 AND NATIONAL GEOGRAPHIC VERTICAL DATUM OF 1929 INFORMATION CONVERTED FROM OKLAHOMA COORDINATE SYSTEM OF 1983 AND NORTH AMERICAN VERTICAL DATUM OF 1988.
 4. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT/LOCATION, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY SANDRIDGE ENERGY ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT/LOCATION, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
 5. THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY