

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

API NUMBER: 045 23698

Approval Date: 11/09/2017

Expiration Date: 05/09/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 18N Rge: 24W

County: ELLIS

SPOT LOCATION: ☐ NW ☐ NW ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 250 1210

Lease Name: HURST-BOUGHAN

Well No: 8 5H

Well will be 250 feet from nearest unit or lease boundary.

Operator
Name: EOG RESOURCES INC

Telephone: 4052463212

OTC/OCC Number: 16231 0

EOG RESOURCES INC
3817 NW EXPRESSWAY STE 500
OKLAHOMA CITY, OK 73112-1483

IDA CHAMPION
7818 NORTH COUNTY ROAD 200 E.
BRAZIL IN 47834

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

Name	Depth	Name	Depth
1 MARMATON	9050	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 599494

Location Exception Orders:

Increased Density Orders: 669604

Pending CD Numbers: 201706486

Special Orders:

Total Depth: 14910

Ground Elevation: 2267

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 580

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 100000 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 BED AQUIFER

Pit Location Formation: CLOUD CHIEF

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 17-33301

E. Haul to Commercial pit facility: Sec. 21 Twn. 14N Rng. 21W Cnty. 129 Order No: 376461

H. SEE MEMO

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX 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.

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 BED AQUIFER

Pit Location Formation: CLOUD CHIEF

HORIZONTAL HOLE 1

Sec 08 Twp 18N Rge 24W County ELLIS

Spot Location of End Point: N2 N2 NE NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 660

Depth of Deviation: 8660

Radius of Turn: 750

Direction: 5

Total Length: 5072

Measured Total Depth: 14910

True Vertical Depth: 9174

End Point Location from Lease,
Unit, or Property Line: 50

Additional Surface Owner	Address	City, State, Zip
JESSE A. STEFFY	4039 TINCHER ROAD	INDIANAPOLIS, IN 46221
JOSEPH STEFFY	1685 DALE DRIVE	PLAINFIELD, IN 46168
GINA M. LAPE	12845 NORTH OAK DRIVE	CAMBY, IN 46113

Notes:

Category

Description

DEEP SURFACE CASING

11/6/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

11/6/2017 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE;

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

INCREASED DENSITY - 669604

11/9/2017 - G58 - (E.O.) 8-18N-24W
X599494 MRMN
1 WELL
EOG RESOURCES, INC.
10-31-2017

This permit does not address the right of entry or settlement of surface damages.

045 23698 HURST-BOUGHAN 8 5H

The duration of this permit is SIX 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.

Category	Description
MEMO	11/6/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 201706486	11/9/2017 - G58 - (E.O.) 8-18N-24W X599494 MRMN COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FEL NO OP NAMED REC 11/3/2017 (THOMAS)
SPACING - 599494	11/9/2017 - G58 - (640)(HOR) 5-18N-24W EST MRMN, OTHERS POE TO BHL NCT 660' FB (SUPERSEDE NON-PRODUCING NON-HORIZONTAL SPACING UNITS; COEXIST WITH PRODUCING NON-HORIZONTAL SPACING UNITS)

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

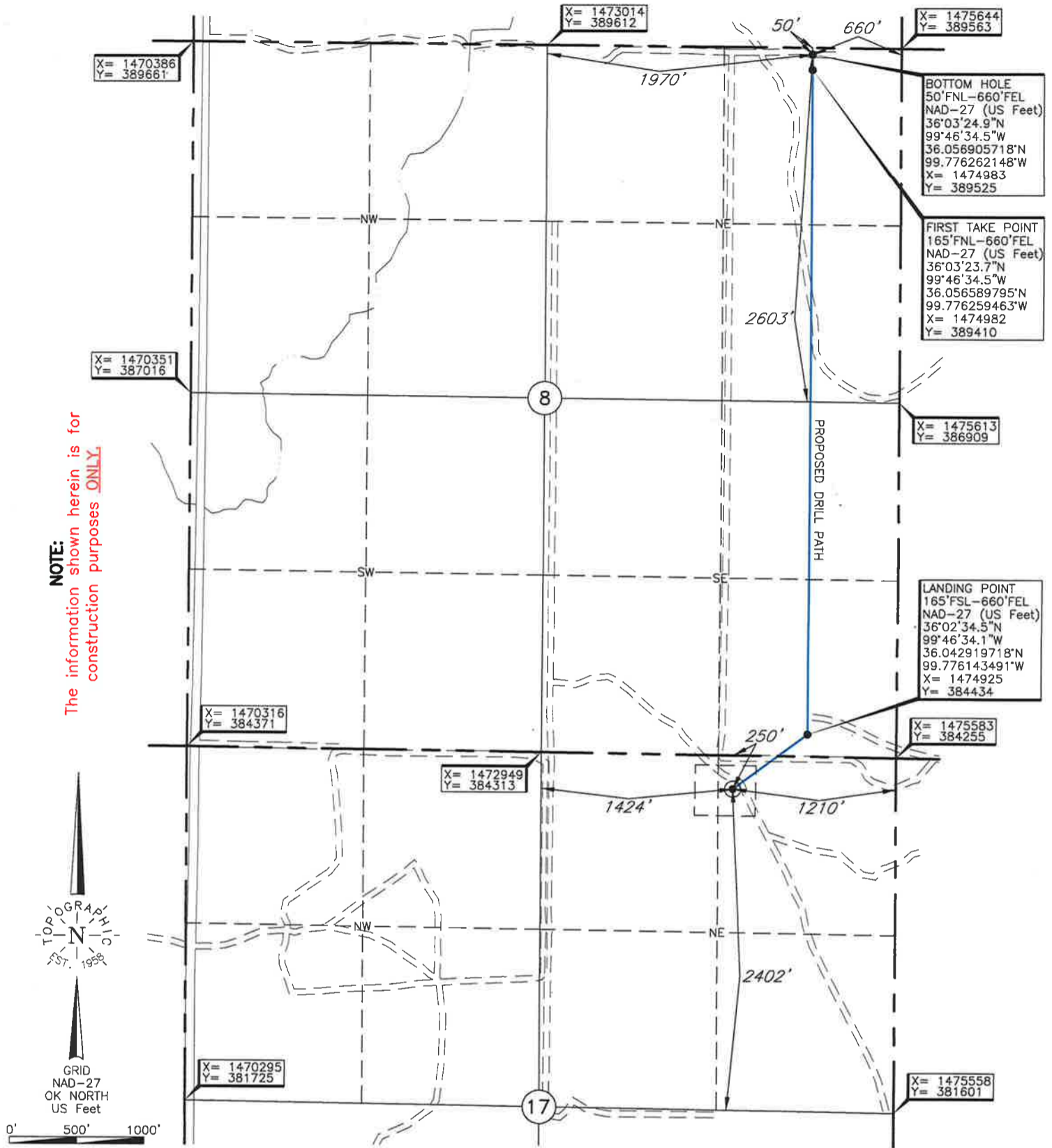
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

API 045-23698

ELLIS

County, Oklahoma

250'FNL-1210'FEL Section 17 Township 18N Range 24W I.M.



[LANDING POINT, FIRST TAKE POINT, BOTTOM HOLE, AND DRILL PATH] INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

Operator: EOG RESOURCES, INC.

Lease Name: HURST-BOUGHAN

Well No.: 08#5H

ELEVATION:

2267' Gr. at Stake

Topography & Vegetation Loc. fell in sandy brush pasture.

Good Drill Site? Yes

Reference Stakes or Alternate Location
Stakes Set None

Best Accessibility to Location From East off lease road.

Distance & Direction

from Hwy Jct or Town From the junction of US Hwy, 60 E-W and US Hwy, 283 S, go South

±6.5 miles, then West ±1 through section 16 to the NE Cor. of Sec 17-T18N-R24W.

Date of Drawing: Nov. 17, 2017

Invoice # 284368A Date Staked: Sept. 19, 2017

TR

DATUM: NAD-27
LAT: 36°02'30.4"N
LONG: 99°46'40.8"W
LAT: 36.041785143°N
LONG: 99.777992501°W
STATE PLANE COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1474371
Y: 384032

CERTIFICATE:

I, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein

Thomas L. Howell
Oklahoma Lic. No. 1433



TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

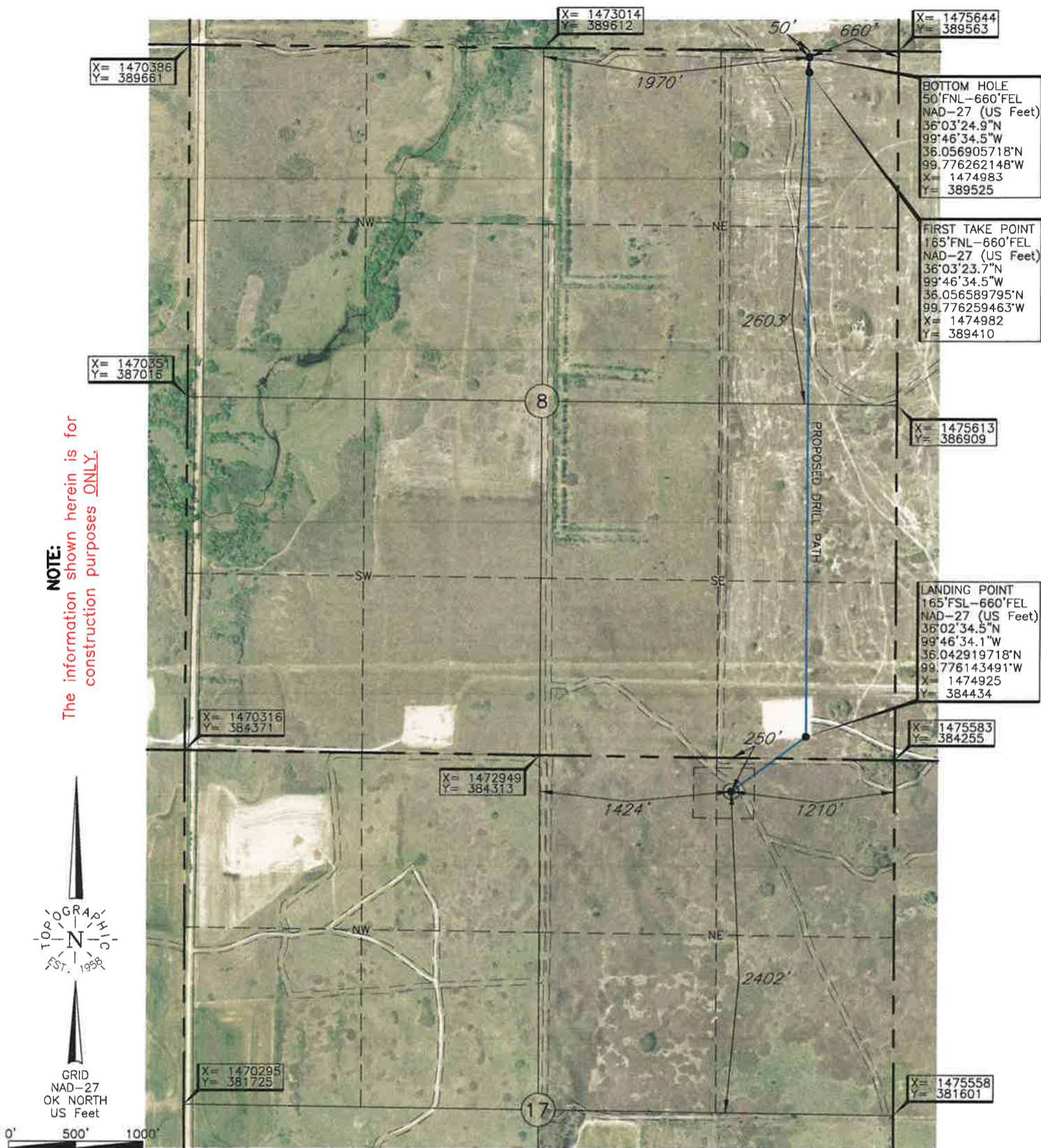
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±6.5 miles, then West ±1 through section 16 to the NE Cor. of Sec 17-T18N-R24W.

This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.

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LONG: 99°46'40.8"W
LAT: 36.041785143°N
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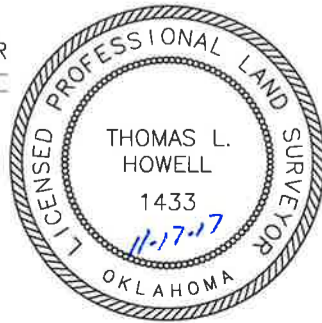
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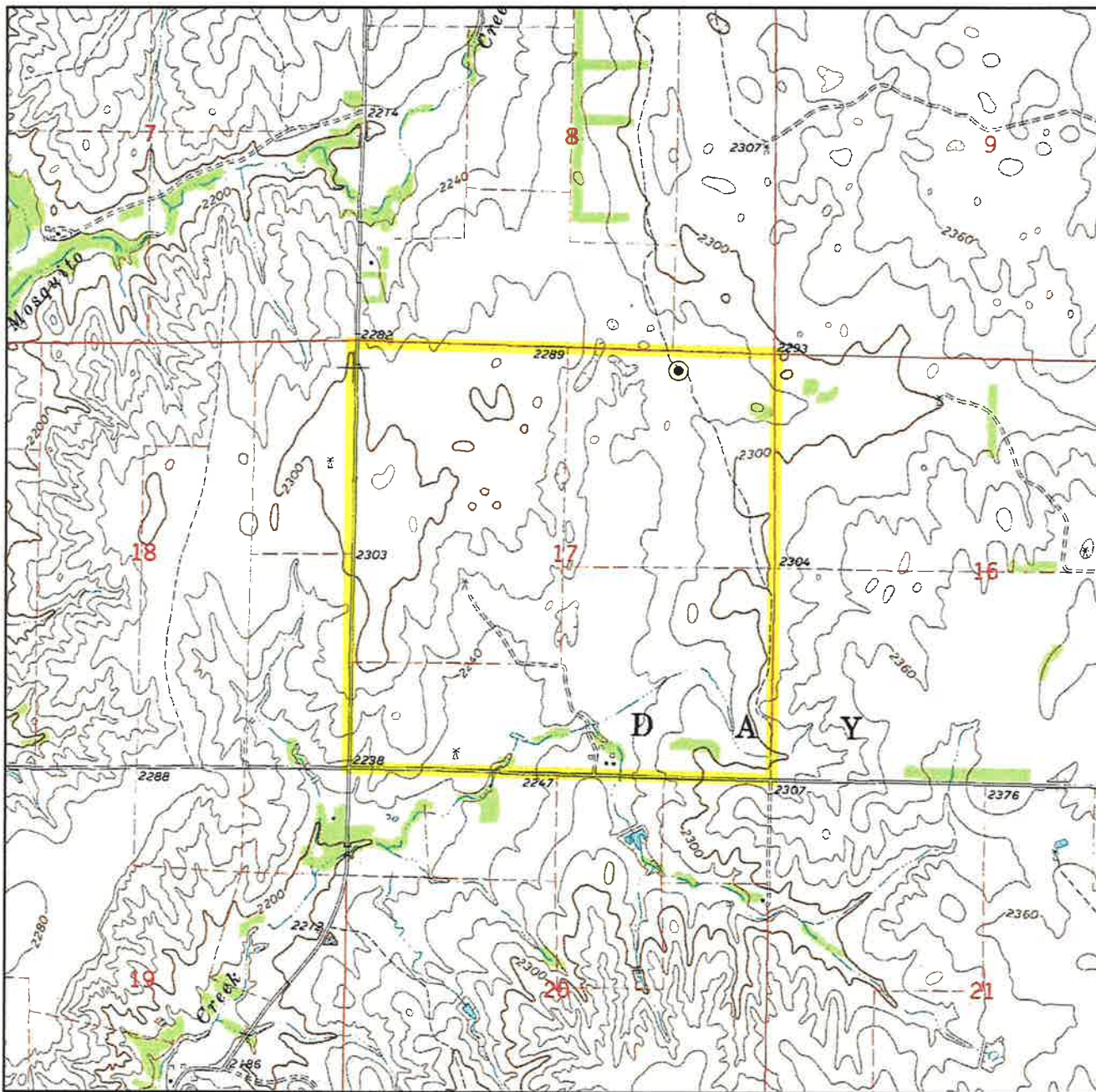
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry

6709 North Classen Blvd. Oklahoma City, OK 73116 www.topographic.com

Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

LOCATION & ELEVATION VERIFICATION MAP



Sec. 17 Twp. 18N Rng. 24W IM

County ELLIS State OK

Operator EOG RESOURCES, INC.

Description 250'FNL-1210'FEL

Lease HURST-BOUGHAN 08#5H

Elevation 2267' Gr. at Stake

U.S.G.S. Topographic
Quadrangle Map ARNETT SE, OK

Above Background Data from
U.S.G.S. Topographic Map

Scale: 1"=2000'

Contour Interval 20'

When elevation is shown hereon it is the ground
elevation of the location stake.
Review this plat and inform us immediately of
any possible discrepancy.



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

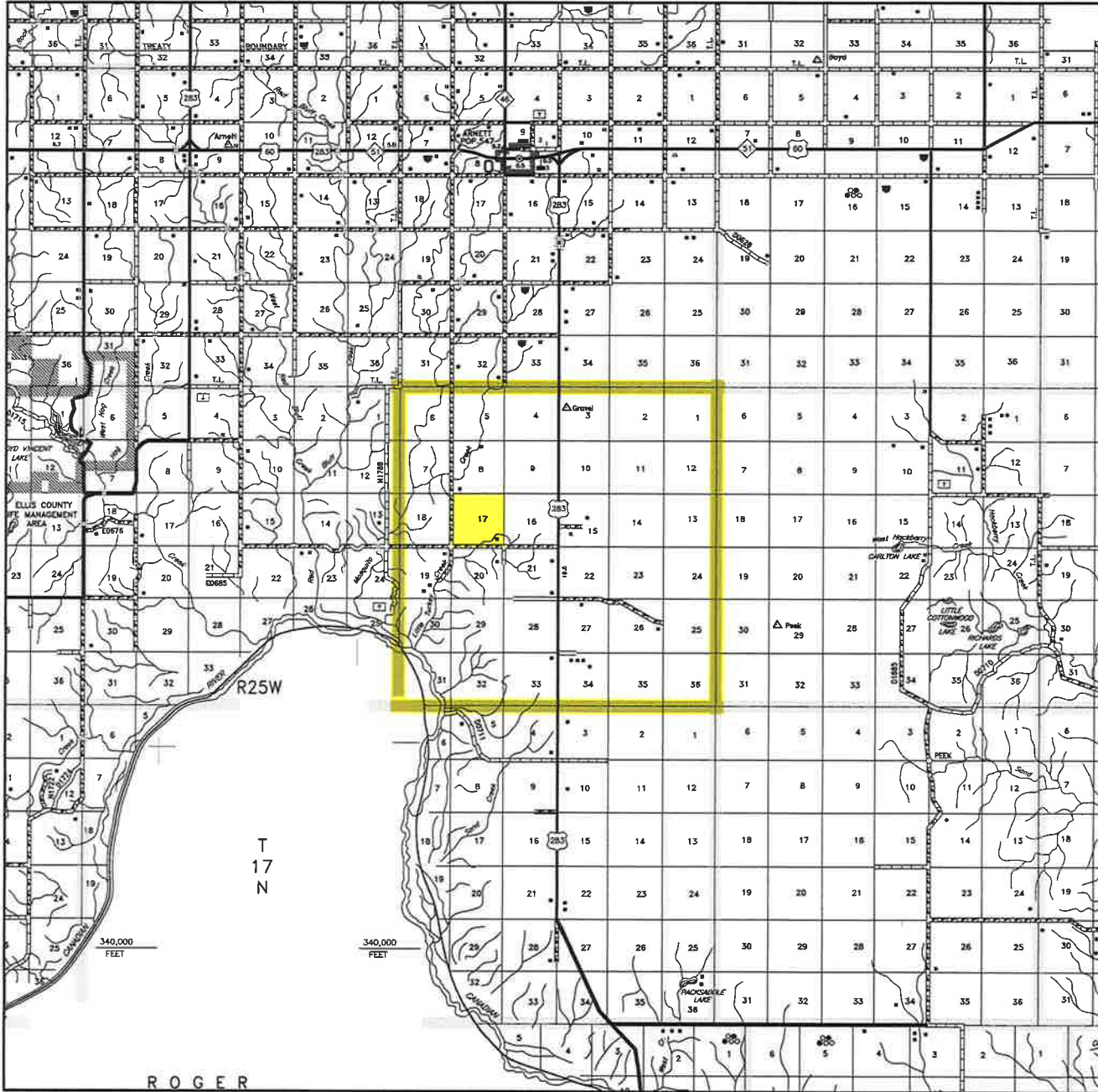
LAND SURVEYORS OF OKLAHOMA

Sept. 19, 2017

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry
6709 North Classen Blvd. Oklahoma City, OK 73116 www.topographic.com
Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

VICINITY MAP



Scale: 1" = 3 Miles

Sec. 17 Twp. 18N Rng. 24W IM

County ELLIS State OK

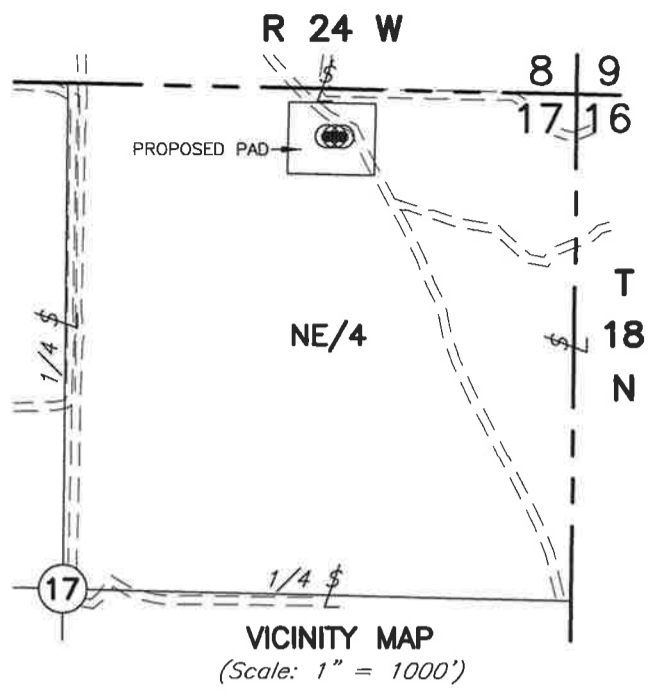
Operator EOG RESOURCES, INC.



LAND SURVEYORS OF OKLAHOMA

T 18 N - R 24 W
(INDIAN MERIDIAN)

PLAT SHOWING
PROPOSED PAD AREA IN THE
NE/4 OF SECTION 17, T18N - R24W
ELLIS COUNTY, OKLAHOMA

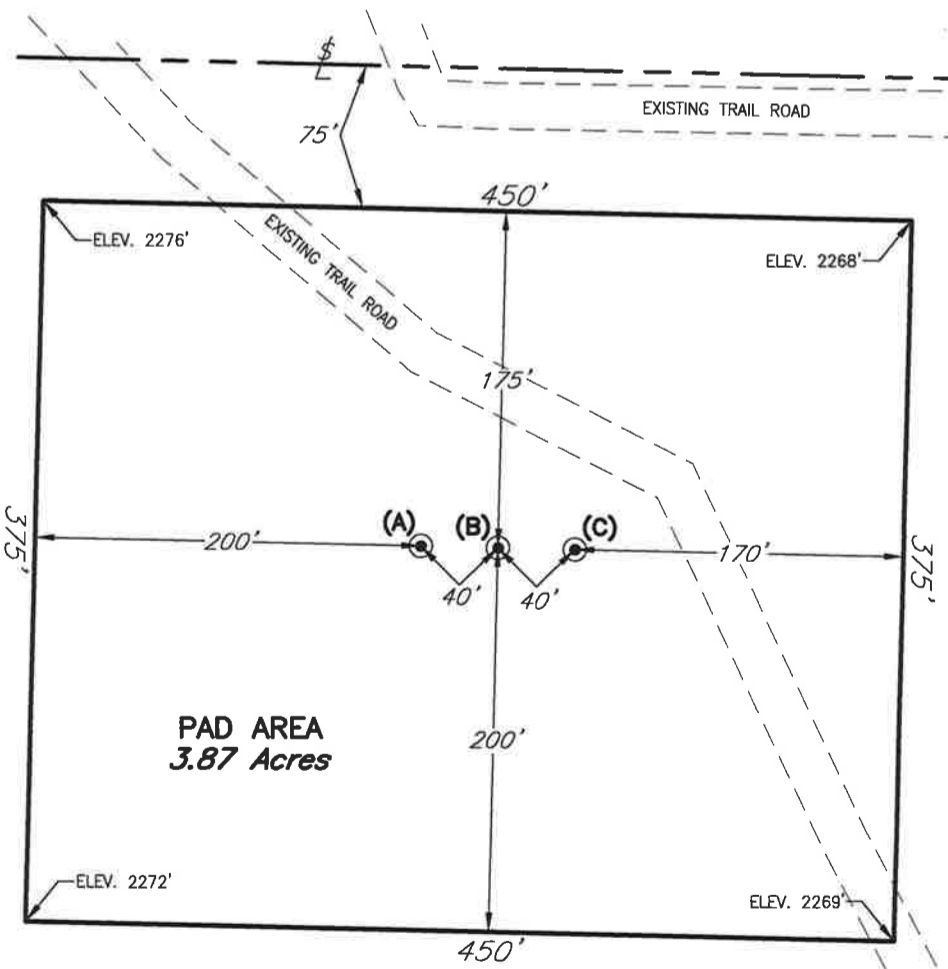
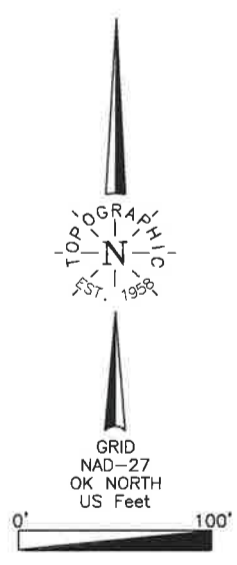


(A) EOG RESOURCES, INC.
HURST-BOUGHAN 08#3H
250' FNL-1290' FEL
Elev. 2266' Gr.

(B) EOG RESOURCES, INC.
HURST-BOUGHAN 0805#4H
250' FNL-1250' FEL
Elev. 2267' Gr.

(C) EOG RESOURCES, INC.
HURST-BOUGHAN 08#5H
250' FNL-1210' FEL
Elev. 2267' Gr.

SECTION 17
NE/4



NOTE:

The information shown herein is
for construction purposes ONLY.

				This plat was prepared exclusively for EOG RESOURCES, INC.		SCALE: 1"=100'	
				and may not be relied upon by any other entity without the written consent of Topographic Land Surveyors of Oklahoma		DATE: 9-20-17	
REVISION				DATE		INVOICE NO.: 281329	
BY				DATE		FILE NAME: L2212B.DWG	
SUR. BY: DJ				9-19-17		DWG NO.: 105048-L2-212-B	
DRAWN BY: TR						SHEET 1 OF 1	
APPROVED BY: TH							

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
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