

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

API NUMBER: 019 26293

Approval Date: 04/24/2018

Expiration Date: 10/24/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 3S Rge: 2E

County: CARTER

SPOT LOCATION: NW SE SE SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 360 495

Lease Name: LIAM

Well No: 1-32H29X

Well will be 360 feet from nearest unit or lease boundary.

Operator Name: XTO ENERGY INC

Telephone: 8178853346; 8178852

OTC/OCC Number: 21003 0

XTO ENERGY INC
810 HOUSTON ST
FORT WORTH, TX 76102-6203

DONALD & MARY ELIZABETH MOSS
6229 REFINERY ROAD
ARDMORE OK 73401

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

	Name	Depth	Name	Depth
1	SPRINGER	4422	6	
2	GODDARD	8653	7	
3	CANEY	8922	8	
4			9	
5			10	

Spacing Orders: 112621
621606

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802539
201802541
201802540

Special Orders:

Total Depth: 20700

Ground Elevation: 739

Surface Casing: 1990

Depth to base of Treatable Water-Bearing FM: 650

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: Yes

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: AIR

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: 4

Liner not required for Category: 4

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 18-34259

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: WATER BASED

Chlorides Max: 5000 Average: 3000

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

PIT 3 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 ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 29 Twp 3S Rge 2E County CARTER

Spot Location of End Point: N2 N2 N2 NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1320

Depth of Deviation: 8604

Radius of Turn: 1107

Direction: 350

Total Length: 10357

Measured Total Depth: 20700

True Vertical Depth: 8922

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

Notes:

Category

Description

DEEP SURFACE CASING

4/23/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

Category	Description
HYDRAULIC FRACTURING	<p>4/23/2018 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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,</p> <p>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</p>
MEMO	<p>4/23/2018 - G71 - PIT 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 3 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT</p>
PENDING CD - 201802539	<p>4/24/2018 - G75 - (E.O.)(640) 32-3S-2E EXT 621606 CNEY XTO ENERGY INC. REC 4-23-2018 (THOMAS)</p>
PENDING CD - 201802540	<p>4/24/2018 - G75 - (E.O.) 32 & 29-3S-2E EST MULTIUNIT HORIZONTAL WELL X112621 SPRG, GDRD 32 & 29-3S-2E X621606 CNEY 29-3S-2E X201802539 CNEY 32-3S-2E (SPRG, CNEY ADJACENT COMMON SOURCES OF SUPPLY TO GDRD) 50% 32-3S-2E 50% 29-3S-2E XTO ENERGY INC. REC 4-23-2018 (THOMAS)</p>
PENDING CD - 201802541	<p>4/24/2018 - G75 - (E.O.) 32 & 29-3S-2E X112621 SPRG, GDRD 32 & 29-3S-2E X621606 CNEY 29-3S-2E X201802539 CNEY 32-3S-2E SHL (32-3S-2E) 360' FSL, 495' FEL COMPL. INT. (32-3S-2E) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (29-3S-2E) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL XTO ENERGY INC. REC 4-23-2018 (THOMAS)</p>
SPACING - 112621	<p>4/24/2018 - G75 - (640) 29 & 32-3S-2E EST SPRG, GDRD, OTHERS</p>
SPACING - 621606	<p>4/24/2018 - G75 - (640) 29-3S-2E EXT 569644 CNEY EST OTHER</p>

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.

LIAM 1-32H29X

SECTION 32
TOWNSHIP 3 SOUTH, RANGE 2 EAST
CARTER COUNTY, OKLAHOMA

API 019-26293

OPERATOR:



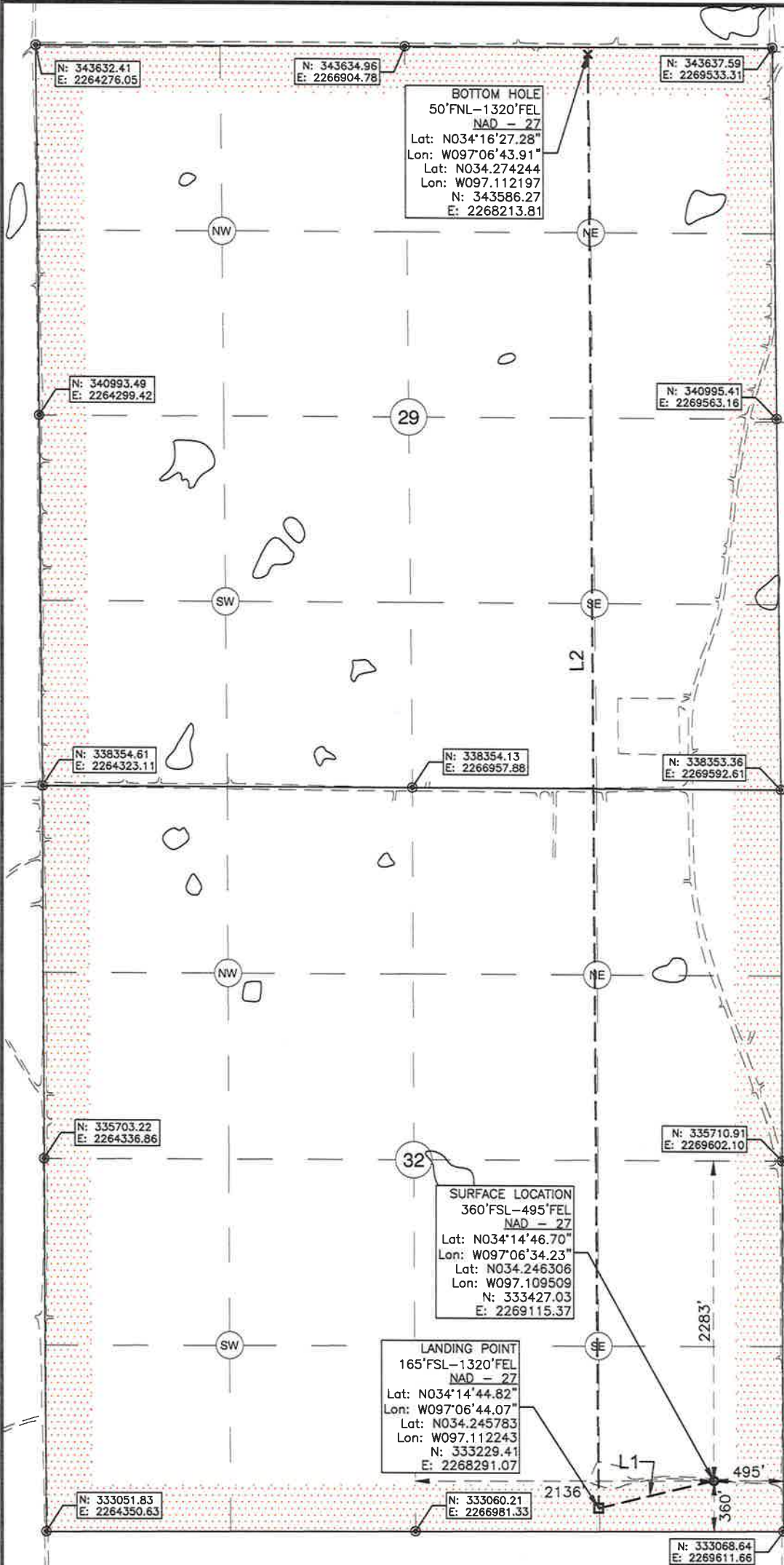
LEGEND:

- EXISTING WELL HEAD/PRODUCTION WELL
- PROPOSED SURFACE HOLE (PSHL)
- SECTION CORNER
- PROPOSED LANDING POINT (LP)
- PROPOSED BOTTOM HOLE (PBHL)
- EXISTING WELL BORE
- PROPOSED WELL BORE
- SUBJECT WELL BORE
- DRILLING UNIT

Line Table		
Line #	Azimuth	Length
L1	256.517979	847.67
L2	359.572606	10357.15



- NOTES:**
- This survey does not represent a boundary survey. It is for Geographical Information Systems (GIS) purposes only as instructed by the client and is not to be relied upon for the establishment of fences, buildings or other further improvement lines. Positions were taken with Survey Grade RTK GPS and NGS OPUS processed control using the NAD27 Oklahoma South State Plane Coordinate System.
 - Bottom hole information provided by operator listed, not surveyed and corner coordinates are taken from points surveyed in field.



BOTTOM HOLE
50'FNL-1320'FEL
NAD - 27
Lat: N034°16'27.28"
Lon: W097°06'43.91"
Lat: N034.274244
Lon: W097.112197
N: 343586.27
E: 2268213.81

SURFACE LOCATION
360'FSL-495'FEL
NAD - 27
Lat: N034°14'46.70"
Lon: W097°06'34.23"
Lat: N034.246306
Lon: W097.109509
N: 333427.03
E: 2269115.37

LANDING POINT
165'FSL-1320'FEL
NAD - 27
Lat: N034°14'44.82"
Lon: W097°06'44.07"
Lat: N034.245783
Lon: W097.112243
N: 333229.41
E: 2268291.07

Surface Hole Location: 360' From South Line Section 32
495' From East Line Section 32

Latitude: N34.246306° (NAD 27)
Longitude: W97.109509° (NAD 27)
Latitude: N34.246399° (NAD 83)
Longitude: W97.109802° (NAD 83)

Ground Elev: 739.28

Landing Point Location: 165' From South Line of Section 32
1320' From East Line of Section 32

Bottom Hole Location: 50' From North Line Section 29
1320' From East Line Section 29

Drilling Unit: Section 29 & 32, T3S, R2E

Operator: XTO Energy, Inc.

Best Accessibility to Location: From East

Distance & Direction from Hwy Jct or Town:
From the intersection of Hwy 77 and Indian Hills Rd, then East 2.0 mi. to Refinery Rd, then North 1.2 mi. to Access Rd. Well Location to the West.

I, Chad Fox, a duly registered Professional Land Surveyor in the State of OKLAHOMA, do hereby certify that the drawing shown hereon was completed and represents a good and accurate survey made upon the ground by me or under my direct supervision.

Chad Fox
2/29/18

CHAD FOX P.L.S. NO. 1758
EX. DATE: 31JAN20 C.O.A. NO. 6186



CDF AND ASSOCIATES, LLC.
208 Dewey Ave. Poteau, OK 74953 (918) 649-3303
Certificate of Authorization No. 6186

JOB NO:	XTO/WP18/LIAM 1-32H29X	DRAWN BY:	LD
DATE:	29/JAN/18	REV:	B SCALE: 1" = 1,000' SHT NO. 1