

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

API NUMBER: 011 23975

Approval Date: 03/28/2018

Expiration Date: 09/28/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 15N Rge: 13W

County: BLAINE

SPOT LOCATION: SW SW SE SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 185 1370

Lease Name: BOXER

Well No: 1-31-30XH

Well will be 185 feet from nearest unit or lease boundary.

Operator Name: ECHO E & P LLC

Telephone: 4057534232

OTC/OCC Number: 23925 0

ECHO E & P LLC
3817 NW EXPRESSWAY STE 840
OKLAHOMA CITY, OK 73112-1400

SCOTT PERKINS FARMS LLC
24319 EAST 890 ROAD
THOMAS OK 73609

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (EX CHESTER)	13300	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 669255
669055
673422

Location Exception Orders: 671491

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 23425

Ground Elevation: 1635

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 40

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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: 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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

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

PERMIT NO: 18-34148

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: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 30 Twp 15N Rge 13W County BLAINE

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 500

Depth of Deviation: 12373

Radius of Turn: 477

Direction: 355

Total Length: 10303

Measured Total Depth: 23425

True Vertical Depth: 13300

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category

Description

DEEP SURFACE CASING

3/20/2018 - 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

3/20/2018 - 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

INTERMEDIATE CASING

3/20/2018 - G71 - 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

LOCATION EXCEPTION - 671491

3/28/2018 - G58 - (I.O.) 30 & 31-15N-13W
X669055 MSSP (31-15N-13W)
X669255 MSSP (30-15N-13W)
COMPL. INT. (30-15N-13W) NCT 165' FNL, NCT 0' FSL, NCT 330' FWL
COMPL. INT. (31-15N-13W) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL
ECHO E & P, LLC
12/28/2017

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.

Category	Description
MEMO	3/20/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 669055	3/28/2018 - G58 - (640)(HOR) 31-15N-13W VAC 119495 MCSTR EST MSSP, OTHERS COMPL. INT. NLT 660' FB
SPACING - 669255	3/28/2018 - G58 - (640)(HOR) 30-15N-13W VAC 119495 MCSTR EST OTHER EXT 661326 MSSP, OTHER COMPL. INT. NLT 660' FB
SPACING - 673422	3/28/2018 - G58 - (I.O.) 30 & 31-15N-13W EST MULTIUNIT HORIZONTAL WELL X669055 MSSP (31-15N-13W) X669255 MSSP (30-15N-13W) 50% 31-15N-13W 50% 30-15N-13W ECHO E & P, LLC 2/9/2018

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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.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 Wireless Way, Okla. City, OK. 73134 (405) 843-4847 * OUT OF STATE (800) 654-3219
 Certificate of Authorization No. 1293 LS

BLAINE

County, Oklahoma

011-23975

185° FSL - 1370° FWL Section 31 Township 15N Range 13W I.M.

X=1817783
Y=275116

X=1812524
Y=275211

X=1815147
Y=275163

BOTTOM HOLE
 165' FNL - 500' FWL
 NAD-27 (US Feet)
 35°45'14.1" N
 98°37'48.5" W
 35.753909670" N
 98.630137426" W
 X=1813023
 Y=275037

MEANDER CORNER
 X=1812514
 Y=273594

X=1817766
Y=272476

MEANDER CORNER
 X=1812547
 Y=270762

MEANDER CORNER
 X=1813475
 Y=269855

MEANDER CORNER
 X=1816175
 Y=269846

X=1817749
Y=269836

MEANDER CORNER
 X=1817737
 Y=267998

MEANDER CORNER
 X=1812524
 Y=267215

MEANDER CORNER
 X=1817334
 Y=264549

X=1812506
Y=264571

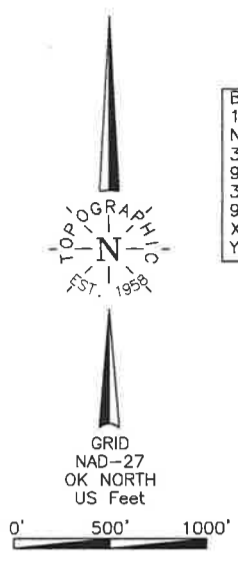
X=1815080
Y=264559

LANDING POINT
 165' FSL - 500' FWL
 NAD-27 (US Feet)
 35°43'32.2" N
 98°37'47.9" W
 35.725605356" N
 98.629965362" W
 X=1813007
 Y=264734

Revision A Date of Drawing: Mar. 14, 2018
 Invoice # 290022 Date Staked: Mar. 12, 2018

NOTE:
 The information shown herein is for construction purposes ONLY.

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



Operator: ECHO E&P LLC.
 Lease Name: BOXER
 Topography & Vegetation Loc. fell in terraced wheat field
 Well No.: 1-31-30XH
 ELEVATION: 1635' Gr. at Stake

Good Drill Site? Yes
 Reference Stakes or Alternate Location Stakes Set None

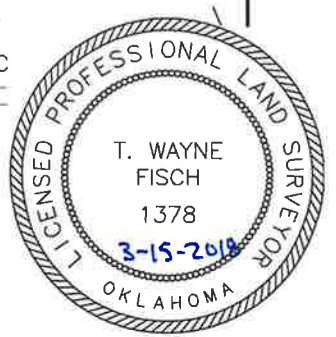
Best Accessibility to Location From SW off lease road
 Distance & Direction from Hwy Jct or Town From Jct. St. Hwy. 33 NE-SW and St. Hwy. 54 S, go E2.0 mi. South on St. Hwy. 54, then E4.5 mi. East, then E0.5 mi. South, then E0.5 mi. East-NE on lease road to the SW Cor. of Sec. 31-T15N-R13W

DATUM: NAD-27
 LAT: 35°43'32.4"N
 LONG: 98°37'37.3"W
 LAT: 35.725664793" N
 LONG: 98.627034699" W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1813877
 Y: 264750

CERTIFICATE:

I, T. Wayne Fisch an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein

T. Wayne Fisch
 Oklahoma Lic. No. 1378



gathered with a GPS receiver with foot horizontal accuracy with vertical accuracy