

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

API NUMBER: 087 22148

Approval Date: 06/11/2018
Expiration Date: 12/11/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 6N Rge: 4W County: MCCLAIN
SPOT LOCATION: NE NW NE NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 285 867

Lease Name: LODI Well No: 8-5H Well will be 285 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

KLAASEN CATTLE COMPANY LLC
21686 SH 76
BLANCHARD OK 73010

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

Name	Depth	Name	Depth
1	MISSISSIPPIAN	10454	6
2			7
3			8
4			9
5			10

Spacing Orders: 671562 Location Exception Orders: 201801452 Increased Density Orders: 678138

Pending CD Numbers:

Special Orders:

Total Depth: 15650 Ground Elevation: 1265 **Surface Casing: 1000** Depth to base of Treatable Water-Bearing FM: 290

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

PIT 1 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 18-34576

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 05 Twp 6N Rge 4W County MCCLAIN

Spot Location of End Point: SE SW SE SE

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 908

Depth of Deviation: 9954

Radius of Turn: 745

Direction: 181

Total Length: 4525

Measured Total Depth: 15650

True Vertical Depth: 10500

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

Notes:

Category

Description

DEEP SURFACE CASING

6/5/2018 - 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

6/5/2018 - 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

INCREASED DENSITY - 678138

6/6/2018 - G58 - 5-6N-4W
X671652 MSSP
2 WELLS
ECHO E&P, LLC
5/22/2018

LOCATION EXCEPTION - 678620

6/6/2018 - G58 - (I.O.) 5-6N-4W
X671652 MSSP
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 660' FWL
ECHO E&P, LLC
6/1/2018

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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.

Category	Description
MEMO	6/5/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 671652	6/6/2018 - G58 - (640)(HOR) 5-6N-4W VAC 175592 MSSLM EXT 652240 MSSP, OTHER COMPL. INT. NCT 660' FB

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.

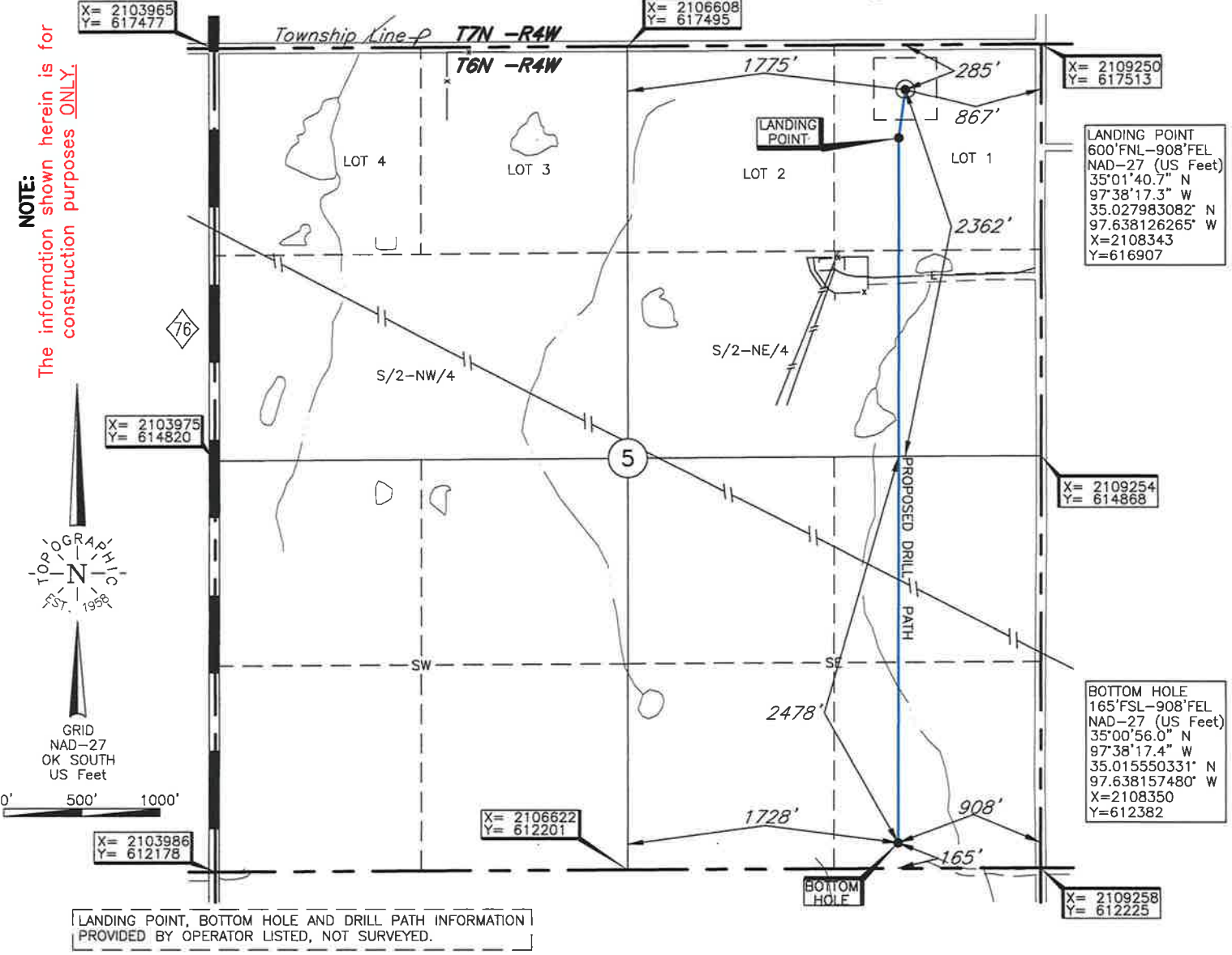
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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

087-22148

MCCLAIN County, Oklahoma

285'FNL - 867'FEL Section 5 Township 6N Range 4W I.M.



Operator: ECHO E&P LLC.

Lease Name: LODI

Well No.: 8-5H

ELEVATION:
1265' Gr. at Stake

Topography & Vegetation Loc. fell in grass pasture

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

Best Accessibility to Location From North off county road

Distance & Direction from Hwy Jct or Town From Jct. St. Hwy. 39 and St. Hwy. 76, go ±0.7 mi. South, then ±1.0 mi. East to the NE Cor. of Sec. 5-T6N-R4W

DATE: May 17, 2018
 INVOICE # 293575B DATE STAKED: May. 09, 2018 AC

DATUM: NAD-27
 LAT: 35°01'43.9"N
 LONG: 97°38'16.7"W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK SOUTH
 X: 2108384
 Y: 617222

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



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