

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

API NUMBER: 087 22188 A

Approval Date: 10/24/2018
Expiration Date: 04/24/2020

Horizontal Hole Oil & Gas

Amend reason: SHL/BHL CHANGE

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 02 Twp: 7N Rge: 4W

County: MCCLAIN

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 235 1660

Lease Name: JOKER

Well No: 2-11H

Well will be 235 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 810
OKLAHOMA CITY, OK 73112-1470

CHARLES NEWTON GRAY
328 WEST ADAMS STREET
PURCELL OK 73080

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

Name	Depth	Name	Depth
1 WOODFORD	9800	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 678750

Location Exception Orders:

Increased Density Orders: 679298

Pending CD Numbers:

Special Orders:

Total Depth: 15103

Ground Elevation: 1197

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 330

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: ON SITE

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: 2

Liner not required for Category: 2

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

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

PERMIT NO: 18-35504

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: ON SITE

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: 3

Liner required for Category: 3

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec 11 Twp 7N Rge 4W County MCCLAIN

Spot Location of End Point: SE SE SW SW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1174

Depth of Deviation: 9237

Radius of Turn: 573

Direction: 183

Total Length: 4966

Measured Total Depth: 15103

True Vertical Depth: 9810

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

Notes:

Category

Description

COMPLETION INTERVAL

4/9/2019 - G56 - WILL BE NO CLOSER THAN 165' FNL, NO CLOSER THAN 165' FSL, NO CLOSER THAN 330' FWL FOR THE WOODFORD FORMATION PER OPERATOR

DEEP SURFACE CASING

4/9/2019 - GA8 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

4/9/2019 - GA8 - 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 - 679298

4/9/2019 - G56 - 11-7N-4W
X678750 WDFD
6 WELLS
ECHO E&P, LLC
6/15/2018

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.

087 22188 JOKER 2-11H

Category	Description
MEMO	4/9/2019 - GA8 - MIN. 20-MIL PIT LINER REQUIRED, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 678750	4/9/2019 - G56 - (640)(HOR) 11-7N-4W VAC. OTHER EST. OTHER EXT. 664084 WDFD, OTHER POE TO BHL NLT 165' FNL/FSL, NLT 330' FEL/FWL (COEXIST WITH NON HOR. SP. UNITS)

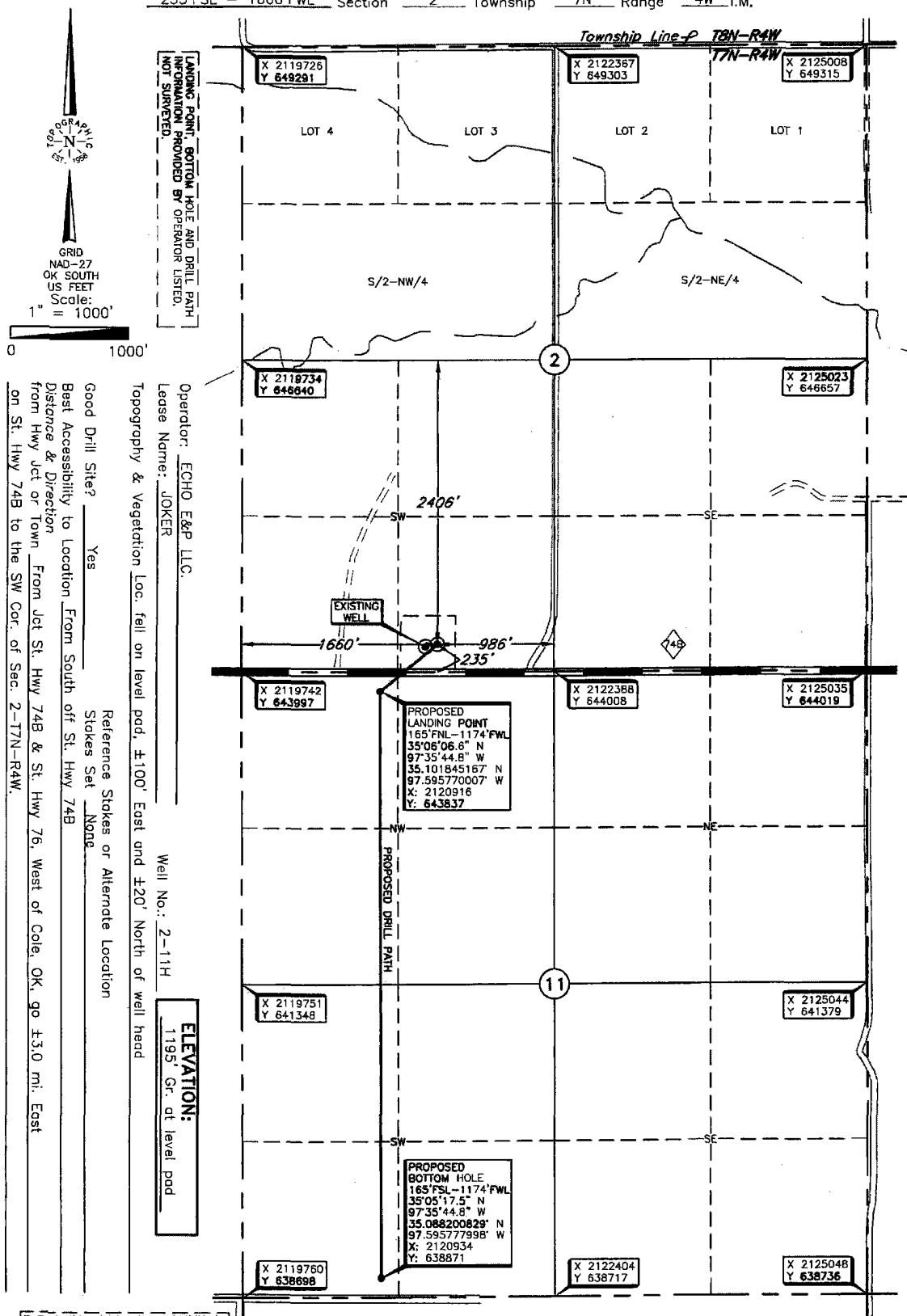
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 • LOCAL (405) 843-4847 • OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

McCLAIN

County, Oklahoma

235' FSL - 1660' FWL Section 2 Township 7N Range 4W 1.M.

THE INFORMATION SHOWN HEREIN IS
FOR CONSTRUCTION PURPOSES ONLY

DATUM: NAD-27
LAT: 35°06'10.6" N
LONG: 97°35'38.9" W
LAT: 35.102944474° N
LONG: 97.594144540° W
STATE PLANE COORDINATES (US FEET):
ZONE: OK SOUTH
X: 2121401
Y: 644239

Date of Drawing: Mar. 12, 2019
Project # 124774 **Date Staked:** Mar. 08, 2019 **AC**

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

