

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

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

Horizontal Hole Oil & Gas

PERMIT TO DRILL

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

County: MCCLAIN

SPOT LOCATION: SW SW SE SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 215 1580

Lease Name: JOKER

Well No: 2-11H

Well will be 215 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: 340

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

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

Approved Method for disposal of Drilling Fluids:

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: 1254
Depth of Deviation: 9237
Radius of Turn: 573
Direction: 181
Total Length: 4966
Measured Total Depth: 15103
True Vertical Depth: 9810
End Point Location from Lease,
Unit, or Property Line: 165

Notes:

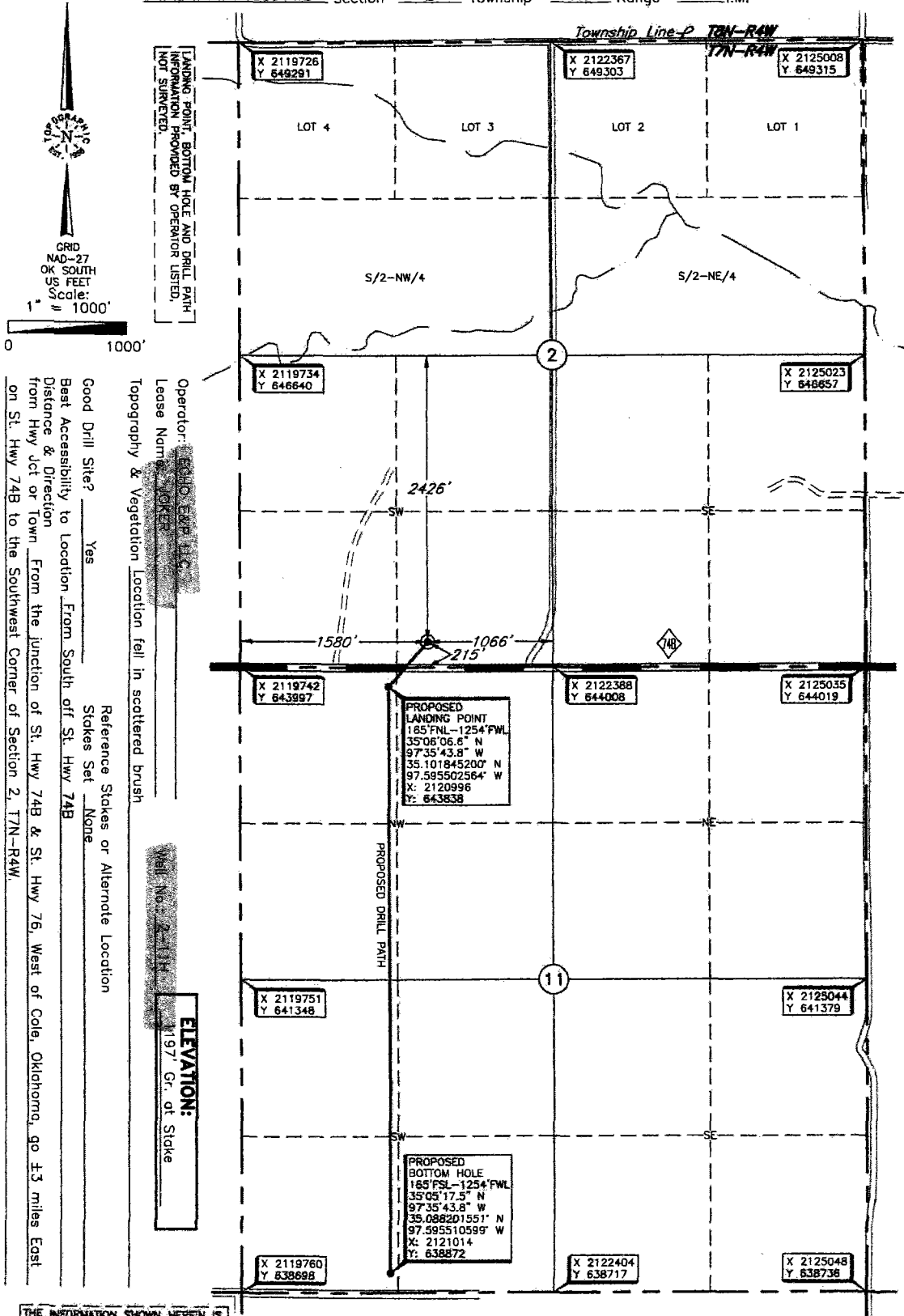
Table with 2 columns: Category, Description. Rows include COMPLETION INTERVAL, DEEP SURFACE CASING, HYDRAULIC FRACTURING, and INCREASED DENSITY - 679298.

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	10/18/2018 - GA8 - MIN. 20-MIL PIT LINER REQUIRED, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 678750	10/19/2018 - G56 - (640)(HOR) 11-7N-4W VAC. 148062 MSRH EST. OTHER EXT. 664084 WDFD, OTHER POE TO BHL NLT 165' FNL/FSL, NLT 330' FEL/FWL (COEXIST WITH NON HOR. SP. UNITS)

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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.

McCLAIN County, Oklahoma
 215' FSL-1580' FWL Section 2 Township 7N Range 4W I.M.



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

Operator: EDUC. EXP. H.C.
 Lease Name: OKER
 Topography & Vegetation Location fall in scattered brush

Mail No. 2-111
ELEVATION:
197' Gr. of Stake

Good Drill Site? Yes
 Best Accessibility to Location From South off St. Hwy 74B
 Distance & Direction From the junction of St. Hwy 74B & St. Hwy 76, West of Cole, Oklahoma, go .33 miles East on St. Hwy 74B to the Southwest Corner of Section 2, 7N-R4W.

Reference Stakes or Alternate Location
 Stakes Set None

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY.

DATUM: NAD-27
 LAT: 35°06'10.4" N
 LONG: 97°35'39.9" W
 LAT: 35.102889248° N
 LONG: 97.594412228° W
 STATE PLANE
 COORDINATES (US FEET):
 ZONE: OK SOUTH
 X: 2121321
 Y: 644219

Date of Drawing: Sept. 24, 2018
 Invoice # 301203A Date Staked: Aug. 28, 2018 NB

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

