

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

API NUMBER: 051 24645

Approval Date: 05/24/2019

Expiration Date: 11/24/2020

Horizontal Hole
Oil & Gas
Multi Unit

PERMIT TO DRILL

WELL LOCATION: Sec: 01 Twp: 7N Rge: 5W County: GRADY
SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 302 770

Lease Name: JESSICA Well No: 1-1-12XH Well will be 302 feet from nearest unit or lease boundary.
Operator ECHO E & P LLC Telephone: 4057534232 OTC/OCC Number: 23925 0
Name:

ECHO E & P LLC
3817 NW EXPRESSWAY STE 810
OKLAHOMA CITY, OK 73112-1470

KOPCAT INC
8177 SKYLINE DRIVE
BLANCHARD OK 73010

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	10260	6	
2	WOODFORD	10475	7	
3	MISENER-HUNTON	10650	8	
4			9	
5			10	

Spacing Orders: 678842
693832

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201901773
201901777
201901771
201901772

Special Orders:

Total Depth: 20974

Ground Elevation: 1273

Surface Casing: 560

Depth to base of Treatable Water-Bearing FM: 470

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: 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 BED AQUIFER

Pit Location Formation: DUNCAN

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

PERMIT NO: 19-36463

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: DUNCAN

HORIZONTAL HOLE 1

Sec 12 Twp 7N Rge 5W County GRADY

Spot Location of End Point: SE SW SW SW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 360

Depth of Deviation: 10031

Radius of Turn: 477

Direction: 185

Total Length: 10194

Measured Total Depth: 20974

True Vertical Depth: 10780

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

Notes:

Category

Description

HYDRAULIC FRACTURING

4/30/2019 - 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

MEMO

4/30/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201901771

5/8/2019 - GB1 - (E.O.) 1-7N-5W
X678842/201900258 MSSP, WDFD
3 WELLS
NO OP. NAMED
REC. 5/24/2019 (MINMIER)

PENDING CD - 201901772

5/8/2019 - GB1 - (E.O.) 12-7N-5W
X678842/201900258 MSSP, WDFD
3 WELLS
NO OP. NAMED
REC. 5/24/2019 (MINMIER)

This permit does not address the right of entry or settlement of surface damages.

051 24645 JESSICA 1-1-12XH

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
PENDING CD - 201901773	5/8/2019 - GB1 - (E.O.) 1 & 12-7N-5W EST MULTIUNIT HORIZONTAL WELL X678842/201900258 MSSP, WDFD, MSRH (MSSP, MSRH ASSOCIATED COMMON SOURCES OF SUPPLY TO WDFD) 50% 1-7N-5W 50% 12-7N-5W ECHO E&P, LLC REC. 5/24/2019 (MINMIER)
PENDING CD - 201901777	5/8/2019 - GB1 - (E.O.) 1 & 12-7N-5W X678842/201900258 MSSP, WDFD, MSRH COMPL. INT. (1-7N-5W) NCT 165' FNL, NCT 0' FSL, NCT 330' FWL COMPL. INT. (12-7N-5W) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL NO OP. NAMED REC. 5/24/2019 (MINMIER)
SPACING - 678842	5/8/2019 - GB1 - (640)(HOR) 1 & 12-7N-5W VAC 98014 MSRH EXT 598370/601838 MSSP, WDFD, MSRH COMPL. INT. (MSSP, MSRH) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL
SPACING - 693832	5/8/2019 - GB1 - (E.O.)(640)(HOR) 1 & 12-7N-5W CONFIRM SP # 678842 FOR RESPONDENTS 4/1/2019

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

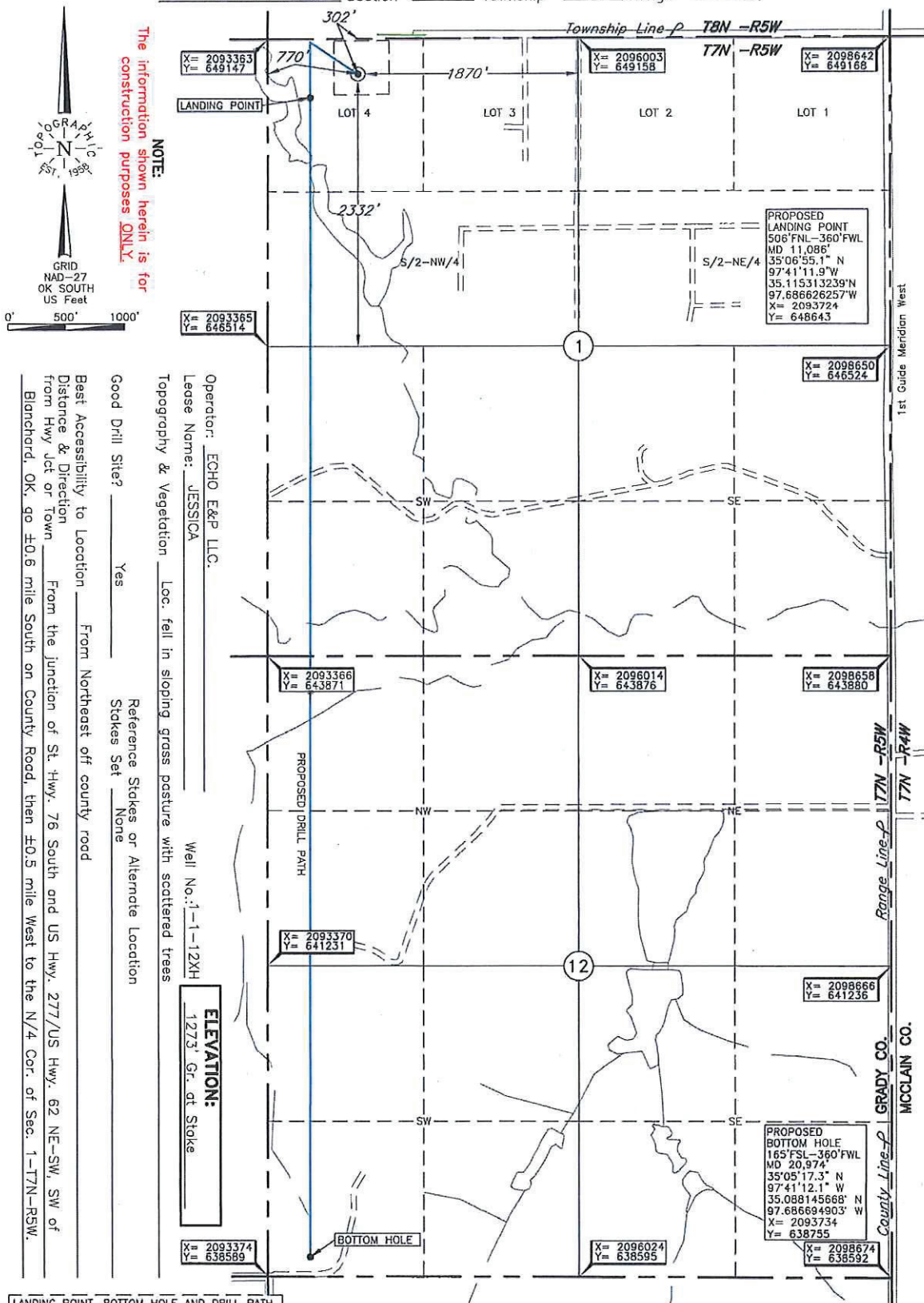
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 • LOCAL (405) 843-4847 • OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

GRADY

County, Oklahoma

302'FNL-770'FWL Section 1 Township 7N Range 5W I.M.



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

DATUM: NAD-27
LAT: 35°06'57.1"N
LONG: 97°41'06.9"W
LAT: 35.115873304°N
LONG: 97.685255232°W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK SOUTH
X: 2094133
Y: 648848

Date of Drawing: Apr. 22, 2019
Project # 125890A Date Staked: Nov. 6, 2018 KH

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

