API NUMBER: 087 22184

Oil & Gas

Horizontal Hole

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

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

PERMIT TO DRILL

WELL LOCATION:	Sec:	14 Twp	: 7N	Rge: 4W	County	: MCC	LAIN		
SPOT LOCATION:	NW	NW	NE	NE	FEET FROM QUARTER:	FROM	NORTH	FROM	EAST
					SECTION LINES:		200		1200
Lease Name: J	OKER				We	ell No:	5-11H		

Well will be 200 feet from nearest unit or lease boundary.

 Operator
 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

THE WALTER AND DIANA ROYSDEN FAMILY TRUST 4677 RED HAWK

GUTHRIE OK 73044

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

	Name	Depth	Name	Depti	h
1	WOODFORD	9800	6		
2			7		
3			8		
4			9		
5			10		
Spacing Orders:	No Spacing	Location Exception Orders:		Increased Density Orders:	679298

Pending CD Numbers: 678750 Special Orders:

Total Depth: 15064 Ground Elevation: 1235 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 320

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

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: 18-35507
H. SEE MEMO

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: NW NW NE NE
Feet From: NORTH 1/4 Section Line: 165
Feet From: EAST 1/4 Section Line: 1254

Depth of Deviation: 9289
Radius of Turn: 521
Direction: 359
Total Length: 4957

Measured Total Depth: 15064

True Vertical Depth: 9810

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

Notes:

Category Description

COMPLETION INTERVAL 10/24/2018 - G56 - WILL BE NO CLOSER THAN 165' FNL, NO CLOSER THAN 165' FSL, NO

CLOSER THAN 330' FEL FOR THE WOODFORD FORMATION PER OPERATOR

DEEP SURFACE CASING 10/19/2018 - 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 10/19/2018 - 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 10/19/2018 - G56 - 11-7N-4W

X678750 WDFD 6 WELLS ECHO E&P, LLC 6/15/2018 Category Description

MEMO 10/19/2018 - GA8 - MIN. 20-MIL PIT LINER REQUIRED, OBM RETURNED TO VENDOR, CUTTINGS

PERMITTED PER DISTRICT

PENDING CD - 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)

