API NUMBER: 051 24580 **OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION** P.O. BOX 52000 **OKLAHOMA CITY, OK 73152-2000** (Rule 165:10-3-1)

02/26/2019 Approval Date: Expiration Date: 08/26/2020

Horizontal Hole Multi Unit

Oil & Gas

Is depth to top of ground water greater than 10ft below base of pit? Y

is located in a Hydrologically Sensitive Area.

Within 1 mile of municipal water well? Y

Liner not required for Category: C Pit Location is BED AQUIFER Pit Location Formation: DUNCAN

Wellhead Protection Area?

Category of Pit: C

## PERMIT TO DRILL

	_			
WELL LOCATION: Sec: 01 Twp: 7N Rge: 5		′		
SPOT LOCATION: NW NW NW NE	,	IORTH FROM EAST		
	SECTION LINES: 3	00 2365		
Lease Name: JESSICA	Well No:	1-1-12XH We	ell will be 300 feet from nearest unit or lease boundary.	
Operator ECHO E & P LLC Name:		Telephone: 4057534232	OTC/OCC Number: 23925 0	
ECHO E & P LLC		WILLIAM T HO	DLLIE	
3817 NW EXPRESSWAY STE 810		PO BOX 893		
OKLAHOMA CITY, OK	73112-1470	NEWCASTLE	OK 73112	
Name  1 MISSISSIPPIAN 2 WOODFORD 3 MISENER-HUNTON 4 5  Spacing Orders: 678842	Depth 10257 10472 10650  Location Exception O	Name 6 7 8 9 10 rders:	Depth  Increased Density Orders: 687339 686141	
Pending CD Numbers: 201900583 201900584			Special Orders:	
Total Depth: 20876 Ground Elevation:	Surface C	asing: 560	Depth to base of Treatable Water-Bearing FM: 470	
Under Federal Jurisdiction: No	Fresh Water S	supply Well Drilled: No	Surface Water used to Drill: Yes	
PIT 1 INFORMATION		Approved Method for dispos	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		D. One time land application H. SEE MEMO	on (REQUIRES PERMIT) PERMIT NO: 19-36108	

## 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?

Wellhead Protection Area?

Y

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** SE Spot Location of End Point: SE SW SW Feet From: SOUTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 2178

Depth of Deviation: 10225 Radius of Turn: 493 Direction: 179

Total Length: 9876

Measured Total Depth: 20876

True Vertical Depth: 11280

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

Notes:

Category Description

HYDRAULIC FRACTURING 2/4/2019 - 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

INCREASED DENSITY - 686141 2/22/2019 - GB1 - 1-7N-5W

X678842 MSSP, WDFD

2 WELLS ECHO E&P, LLC 11/6/2018

INCREASED DENSITY - 687339 2/22/2019 - GB1 - 12-7N-5W

X678842 MSSP, WDFD

2 WELLS ECHO E&P, LLC 11/29/2018

MEMO 2/4/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201900583 2/22/2019 - GB1 - (E.O.) 1 & 12-7N-5W

EST MULTIUNIT HORIZONTAL WELL

X678842 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. 2/22/2019 (JACKSON)

PENDING CD - 201900584 2/22/2019 - GB1 - (E.O.) 1 & 12-7N-5W

X678842 MSSP, WDFD, MSRH

COMPL. INT. (1-7N-5W) NCT 0' FSL, NCT 165' FNL, NCT 1800' FEL COMPL. INT. (12-7N-5W) NCT 165' FSL, NCT 0' FNL, NCT 1800' FEL

NO OP. NAMED

REC. 2/22/2019 (JACKSON)

PUBLIC WATER SUPPLY WELL 2/4/2019 - G71 - ACES SPORTS BAR - 1 PWS/WPA, NE/4 36-8N-5W

SPACING - 678842 2/22/2019 - 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

