# API NUMBER: 051 24236 A

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

Approval Date:	12/18/2017	
Expiration Date:	06/18/2018	

Horizontal Hole

Oil & Gas

Amend reason: MOVE SHL

## AMEND PERMIT TO DRILL

WELL LOCATION: S		County: GRA	ADY	EAST			
	SECTI	ION LINES;	276	2462			
Lease Name: KA	SHMIR	Well No:	1-13H	Well	will be 276 feet from nears	est unit or lease boundary.	
Operator Name:	ECHO E & P LLC		Telephone: 40	57534232	OTC/OCC Number:	23925 0	
ECHO E & P LLC  3817 NW EXPRESSWAY STE 840  OKLAHOMA CITY, OK 73112-14		12-1400	And A Commission of the Andrews Commission o		E REVOCABLE TRUST UNTRY CLUB ROAD OK 7	73018	
Formation(s)		Depth	_	Name	Dep	th	
1 MIS 2	SSISSIPPIAN	12900	6 7				
3			8				
4			9				
5			10	)			
Spacing Orders: 67	71190	Location Exception Orders:			Increased Density Orders:		
Pending CD Numbers: 201707677					Special Orders:		
Total Depth: 1860	OO Ground Elevation: 1141	Surface	Casing: 1500		Depth to base of Treatable Water	er-Bearing FM: 530	
Under Federal Juri	isdiction: No	Fresh Wate	er Supply Well Drilled:	No	Surface Water	used to Driil: No	
PIT 1 INFORMATIO	· ·		Ар	proved Method for disposa	l of Drilling Fluids:		
Type of Pit System:	CLOSED Closed System Means Steel F	Pits					
Type of Mud System	: WATER BASED		a	One time land application	(REQUIRES PERMIT)	PERMIT NO: 17-33537	
Chlorides Max: 5000	Average: 3000		н	SEE MEMO			
Is depth to top of gro	ound water greater than 10ft below base of	pit? Y		<del> </del>			
Within 1 mile of mun	•						
Wellhead Protection							
	in a Hydrologically Sensitive Area.						
Category of Pit:							
Liner not required f							
Pit Location is NO							
Pit Location Formation	on: CHICKASHA						

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 not located in a Hydrologically Sensitive Area

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: CHICKASHA

#### HORIZONTAL HOLE 1

Sec 13 Twp 7N Rge 7W County GRADY

Spot Location of End Point: N2 N2 N2 N2 N2 Feet From: NORTH 1/4 Section Line: 165
Feet From: EAST 1/4 Section Line: 2640

Depth of Deviation: 12557 Radius of Turn: 632 Direction: 358

Total Length: 5050

Measured Total Depth: 18600
True Vertical Depth: 14708
End Point Location from Lease,

Unit, or Property Line: 165

Notes:

Category Description

DEEP SURFACE CASING 11/30/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR

OR SURFACE CASING

HYDRAULIC FRACTURING 11/30/2017 - 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

PENDING CD - 201707677 12/15/2017 - G60 - (I.O.) 13-7N-7W

X671190 MSSP

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 1870' FEL

NO OP. NAMED REC. 12/5/17 (MINMIER)

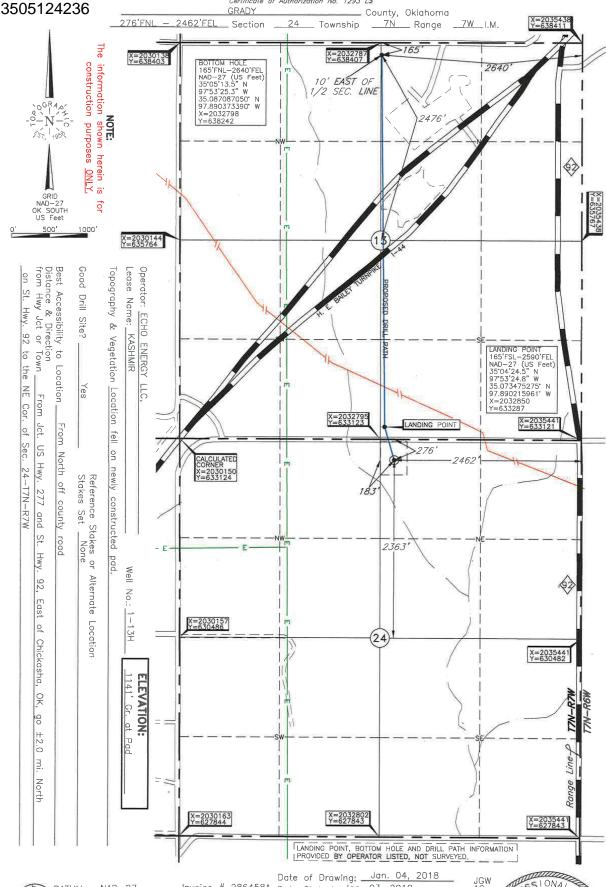
SPACING - 671190 12/15/2017 - G60 - (640)(HOR) 13-7N-7W

EST MSSP, OTHERS

COMPL. INT. (MSSP) NLT 660' FB

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.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS



DATUM: NAD-27 LAT: 35°04'20.1"N LONG: 97°53'23.2"W LAT: 35.072262679' N LONG: 97.889789489° W STATE PLANE COORDINATES: (US Feet) OK SOUTH ZONE: \_ X:<u>20</u>32978

632846

Invoice # <u>286458A</u> Date Staked: <u>Jan. 03, 2018</u>

## **CERTIFICATE:**

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

Thoma 2. Navel a Lic. No. \_\_\_1433 Oklahoma Lic. No. \_\_

