API NUMBER: 051 24236 B

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

Lease Name: KASHMIR

Amend reason: MOVE BHL AND LANDING POINT

AMEND PERMIT TO DRILL

WELL LOCATION:	Sec:	24	Twp:	7N	Rge:	7W	County	: GRA	DY			
SPOT LOCATION:	NW	NW	' N	W	NE		FEET FROM QUARTER:	FROM	NORTH	FROM	EAST	
							SECTION LINES:		276		2462	

Well will be 276 feet from nearest unit or lease boundary.

 Operator
 ECHO E & P LLC
 Telephone:
 4057534232
 OTC/OCC Number:
 23925
 0

Well No: 1-13H

ECHO E & P LLC 3817 NW EXPRESSWAY STE 840

OKLAHOMA CITY, OK 73112-1400

NATHAN S COE REVOCABLE TRUST 408 WEST COUNTRY CLUB ROAD

CHICKASHA OK 73018

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	12900 6		
2		7		
3		8		
4		9		
5		10		
Spacing Orders:	671190	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201707677 Special Orders:

Total Depth: 18600 Ground Elevation: 1141 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 530

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

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

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

H. SEE MEMO

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

PERMIT NO: 17-33537

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

Rge 7W Sec 13 Twp 7N County **GRADY** NE Spot Location of End Point: ΝE NW NW Feet From: NORTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 2063

Depth of Deviation: 12557 Radius of Turn: 955

Direction: 4

Total Length: 5442

Measured Total Depth: 19500

True Vertical Depth: 13975

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.

OGRADA N

GRID NAD-27 OK SOUTH US Feet

Best Accessibility to Loc Distance & Direction from Hwy Jct or Town _ on St. Hwy. 92 to the

ZE

From

Jct.

S

Hwy.

277

and

35 road

∃wy.

92

East

of

Chickasha,

웃 go ±2.0 3 North

24-T7N-R7W

Location

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 GRADY County, Oklahoma 2462'FEL__ Section __ 7<u>N</u> Range <u>7W</u>I.M. Township 165. The X=2032787 Y=638407 2063 X=203013 Y=638403 BOTTOM HOLE 165'FNL-2063'FEL NAD-27 (US Feet) 35'05'13.5"N 97-53'18.4"W 35.087087862'N 97.888444802'W X 2033375 Y 638243 BOTTOM HOLE construction purposes information 587 shown herein is purposes ONLY. **6**2 or 1000 X=2030144 Y=635764 Good Operator: opography & Drill Name: ECHO Site? KASHMIR Vegetation E&P LANDING POINT 165'FSL-2063'FEL NAD-27 (US Feet) 35'04'24.5"N 97'53'18.4"W 35.073472610'N 97.888454787'W X 2033377 Y 633287 Yes Location LANDING POINT X=2032795 Y=633123 fell 276 on CALCULATED CORNER X=2030150 Y=633124 2462 Stakes Reference constructed Set Stakes o 2363 9 WeⅡ 62 Alternate No.: 1-13H X=2030157 Y=630486 Location (24) X=2035441 Y=630482 **ELEVATION:** TZN-RZW X=2032802 Y=627843 X=2035441 Y=627843 LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. PROFESSIONAL Revision X B Date of Drawing: Apr. 16, 2018 JGW AC Invoice # 286458A Date Staked: Jan. 03, 2018 **CERTIFICATE:** THOMAS I i, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the Thomas L. Howell HOWELL 1433 information shown herein

DATUM: NAD-27 LAT: 35°04'20.1"N LONG: <u>97*53'23.2"W</u> LAT: <u>35.07**226**2679* N</u> LONG: 97.889789489° W STATE PLANE COORDINATES: (US Feet) OK SOUTH ZONE:

> X: 2032978 632846

1. Navel Oklahoma Lic. No.

