API NUMBER: 011 23613

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: 06/10/2016
Expiration Date: 12/10/2016

PERMIT TO DRILL

WELL LOCATION:	Sec:	34	Twp:	19N	Rge:	12W	County:	BLAINE
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SPOT LOCATION: SW SE SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST SECTION LINES: 250 2185

Lease Name: HEATH Well No: 3-1H Well will be 250 feet from nearest unit or lease boundary.

 Operator Name:
 CARRERA ENERGY LLC
 Telephone:
 4326956970
 OTC/OCC Number:
 23514
 0

CARRERA ENERGY LLC

PO BOX 5036

Spa

MIDLAND, TX 79704-5036

MARK R. & KATRINA L. KOPF

ROUTE 1, BOX 34

LONGDALE OK 73755

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	8900	6	
2	WOODFORD	9500	7	
3			8	
4			9	
5			10	
pacing Orders:	644764	Location Exception Orders:	645272	Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 14207 Ground Elevation: 1549 Surface Casing: 1000 Depth to base of Treatable Water-Bearing FM: 90

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: 8000 Average: 5000

Is depth to top of ground water greater than 10ft below base of pit? $\quad \mbox{Y}$

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: DOG CREEK

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 16-31305

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

HORIZONTAL HOLE 1

BLAINE Sec 03 Twp 18N Rge 12W County Spot Location of End Point: SW SF SE SW Feet From: SOUTH 1/4 Section Line: 200 Feet From: WEST 1/4 Section Line: 2185

Depth of Deviation: 8577
Radius of Turn: 573
Direction: 180
Total Length: 4730

Measured Total Depth: 14207

True Vertical Depth: 9500

End Point Location from Lease,
Unit, or Property Line: 200

Notes:

Category Description

DEEP SURFACE CASING 6/6/2016 - G71 - 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 6/6/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC

FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS

DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME

COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

INTERMEDIATE CASING 6/6/2016 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-

PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE

MORROW SERIES

LOCATION EXCEPTION - 645272 6/8/2016 - G75 - (I.O.) 3-18N-12W

X644764 MSSP, WDFD

COMPL. INT. NCT 165 FNL, NCT 165 FSL, NCT 1320 FWL

CARRERA ENERGY LLC

9-17-2015

SPACING - 644764 6/8/2016 - G75 - (640)(HOR) 3-18N-12W

VAC 105366 UNCCR VAC 311705 MSSLM EST MSSP, WDFD

POE TO BHL (MSSP) NCT 660' FB

POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Control of Authorization No. 1293 LS. _ County, Oklahoma 250'FSL-2185'FWL Section 34 Township 19N Range 12W I.M. APT 011-23613 BOTTOM HOLE PROVIDED BY X 1859257 Y 395740 X 1861884 Y 395712 X 1864512 Y 395684 AND DRILL PATH OPERATOR LISTED, H INFORMATION TO SURVEYED. Scale: = 1000' X 1859251 Y 393110 X 1864507 Y 393058 Best Accessibility to Location <u>From county road South</u>
Distance & Direction
from Hwy Jct or Town <u>From Southard, OK., at the Ji</u>
on St. Hwy 51A to the <u>Southwest Corner of Section</u> Good Drill Site? Topography & Vegetation Location Operator: <u>CARRERA ENERGY, L</u> Lease Name: <u>CARRERA</u> HEATH Name: **(51)** 2378 Yes EXISTING POWERLINE PROPOSED PAD X 1861874 2185 X 1864502 Y 390433 250 k T19N-R12W fell in T18N-R12W X 185924 Y 390479 443 wheat Reference S Stakes Set road South field, LOT 4 LOT 3 LOT 2 e Stakes or . None ±252' 으. wel! West of powerline ₩eli Alternate No.: S/2-NW/4 S/2-NE/4 3-1H Location X 1859242 Y 387824 3 ELEVATION: 1549' Gr. a DRILL PROPOSED 유 2428 Stake BOITOM HOLE 200 FSL-2185 FWL 36 03 28.3 N 98 28 07.7 W 36.05786 6381 N 98.4688 18563 W X= 1861424 Y= 385403 11 1861841 385203 1884444 385200 200% Date of Drawing: Jun. 17, 2015 Invoice # 245338 Date Staked: Jun. 10, 2015 5510NA) JGW

OGR4

GRID NAD-27 OK NORTH US FEET

34, T19N-R12W

Ηwy

51A

and

St

Hwy

5

30

H mile North NOTE:
The information shown herein is for construction purposes ONLY. DATUM: NAD-27 was receiver occuracy. LAT: 36.04.20.8" N LONG: 98.28.08.0" W **CERTIFICATE:** This information with a GPS related with a GPS related to the control of the cont 36.072434118° N LAT: _ Lee K. Goss LEE X. _an Oklahoma Licensed Land LONG: 98.468880090° W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, de hereby certify to the GOSS STATE PLANE COORDINATES (US FEET): 1778 information show ZONE: OK NORTH OF LAHON'S 1861432 gath ## 06 390710 1778 Oklahoma Lic. No.

SURVE