

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

API NUMBER: 003 23257

Approval Date: 06/02/2016

Expiration Date: 12/02/2016

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 25N Rge: 12W

County: ALFALFA

SPOT LOCATION: ☐ SW ☐ SW ☐ SE ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 273 1570

Lease Name: LOIS 16-25-12

Well No: 1H

Well will be 273 feet from nearest unit or lease boundary.

Operator Name: CHESAPEAKE OPERATING LLC

Telephone: 4059353425; 4059358

OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC
PO BOX 18496
OKLAHOMA CITY, OK 73154-0496

LOIS KASSIK C/O NEAL HOFFMAN
13593 STATE HWY. 8
CARMEN OK 73726

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	5980	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 590902

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201601997
201601998

Special Orders:

Total Depth: 11200

Ground Elevation: 1394

Surface Casing: 620

Depth to base of Treatable Water-Bearing FM: 370

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

Chlorides Max: 25000 Average: 8000

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: C

Liner not required for Category: C

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

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

PERMIT NO: 15-30611

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 16 Twp 25N Rge 12W County ALFALFA

Spot Location of End Point: N2 N2 NE NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 5650

Radius of Turn: 573

Direction: 4

Total Length: 4650

Measured Total Depth: 11200

True Vertical Depth: 6011

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

Notes:

Category	Description
HYDRAULIC FRACTURING	5/31/2016 - 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.
PENDING CD - 201601997	6/1/2016 - G75 - (E.O.) 16-25N-12W X590902 MSSP 1 WELL NO OP. NAMED REC 6-2-2016 (P. PORTER)
PENDING CD - 201601998	6/1/2016 - G75 - (E.O.) 16-25N-12W X590902 MSSP COMPL. INT. NCT 165 FSL, NCT 165 FNL, NCT 1320 FWL NO OP. NAMED REC 6-2-2016 (P. PORTER)
SPACING - 590902	6/1/2016 - G75 - (640) 16-25N-12W VAC 118849 MISS EXT OTHERS EST MSSP

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003 23257 LOIS 16-25-12 1H

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

ALFALFA

County, Oklahoma

273'FSL-1570'FWL Section 16 Township 25N Range 12W I.M.

NAD-27
X 1852087.4
Y 601812.4
NAD-83
X 1820486.5
Y 601839.9

NAD-27
X 1857361.0
Y 601779.6
NAD-83
X 1825760.0
Y 601807.1

Bottom Hole
165'FNL-1980'FWL
NAD-27 (US Feet)
36°39'06.2" N
98°29'50.9" W
36.651736" N
98.497460" W
X=1854066.1
Y=601635.0
NAD-83 (US Feet)
36°39'06.4" N
98°29'52.1" W
36.651768" N
98.497816" W
X=1822464.6
Y=601661.7

Landing Point
500'FSL-1980'FWL
NAD-27 (US Feet)
36°38'20.6" N
98°29'51.0" W
36.639062" N
98.497502" W
X=1854030.1
Y=597021.0
NAD-83 (US Feet)
36°38'20.7" N
98°29'52.3" W
36.639094" N
98.497859" W
X=1822428.5
Y=597047.7

SURFACE HOLE
273'FSL-1570'FWL
NAD-83 (US Feet)
36°38'18.5" N
98°29'57.3" W
36.638475" N
98.499256" W
X=1822017.4
Y=596824.5

NAD-27
X 1852046.3
Y 596535.3
NAD-83
X 1820445.3
Y 596562.8

Bottom Hole, Landing Point, and Drill Path information
provided by operator listed, NOT Surveyed.

NOTE:
The information shown herein is for
construction purposes ONLY.

ELEVATION:

1395' Gr. at pad NAVD-88
1394' Gr. at pad NGVD-29

Operator: CHESAPEAKE OPERATING, L.L.C.

Lease Name: LOIS 16-25-12

Well No.: 1H

Topography & Vegetation Location fell on existing level pad area.

Good Drill Site? Yes

Reference Stakes or Alternate Location
Stakes Set None

Best Accessibility to Location From South off county road

Distance & Direction

from Hwy Jct or Town From Carmen, Ok, go ±4 miles North on black top road, then ±2
miles West to the SW Cor. of Sec. 16-T25N-R12W

DATUM: NAD-27
LAT: 36°38'18.4"N
LONG: 98°29'56.0"W
LAT: 36.638441° N
LONG: 98.498901° W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1853618.4
Y: 596797.0

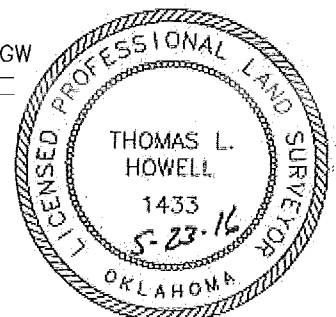
Date of Drawing: May 20, 2016
Invoice # 261011 Date Staked: May 20, 2016

CERTIFICATE:

I, Thomas L. Howell on Oklahoma Licensed Land
Surveyor and an authorized agent of Topographic Land
Surveyors of Oklahoma, do hereby certify to the
information shown herein.

Thomas L. Howell
Oklahoma Lic. No. 1433

JGW



GRID
NAD-27
Okla. North
US Feet

0' 100'