

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

API NUMBER: 129 24106 A

Approval Date: 07/20/2017
Expiration Date: 01/20/2018

Horizontal Hole Oil & Gas

Amend reason: CORRECT BHL

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 14N Rge: 21W County: ROGER MILLS
SPOT LOCATION: NE NW NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 250 2160

Lease Name: BOAL Well No: 2-14H Well will be 250 feet from nearest unit or lease boundary.
Operator Name: JMA ENERGY COMPANY LLC Telephone: 4059474322 OTC/OCC Number: 20475 0

JMA ENERGY COMPANY LLC
1021 NW GRAND BLVD
OKLAHOMA CITY, OK 73118-6039

ESTATE OF JEFFREY LYNN BOAL
P.O. BOX 1732
GRASS VALLEY CA 95945

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

Name	Depth	Name	Depth
1 CLEVELAND	10165	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 189381
196059

Location Exception Orders: 660516

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 14652

Ground Elevation: 1873

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 390

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

PIT 1 INFORMATION

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? 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 BED AQUIFER

Pit Location Formation: CLOUD CHIEF

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 17-32904

H. SEE MEMO

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.

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: CLOUD CHIEF

HORIZONTAL HOLE 1

Sec 14 Twp 14N Rge 21W County ROGER MILLS

Spot Location of End Point: E2 SE SW SE

Feet From: SOUTH 1/4 Section Line: 330

Feet From: EAST 1/4 Section Line: 1400

Depth of Deviation: 9625

Radius of Turn: 573

Direction: 175

Total Length: 4127

Measured Total Depth: 14652

True Vertical Depth: 10165

End Point Location from Lease,
Unit, or Property Line: 330

Additional Surface Owner	Address	City, State, Zip
JAMES BOAL	13929 25TH AVE SE	MILL CREEK, WA 98012

Notes:

Category	Description
DEEP SURFACE CASING	7/14/2017 - 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	8/9/2017 - G58 - 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: HTTP://WWW.OCCWEB.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 HTTP://FRACFOCUS.ORG/

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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.

Category	Description
LOCATION EXCEPTION - 660516	7/19/2017 - G60 - (I.O.) 14-14N-21W X189381 CLVD ** COMPL. INT. NCT 330' FNL, NCT 330' FSL, NCT 660' FWL JMA ENERGY CO. LLC. 2/2/17 ** WILL BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION (PER ATTORNEY FOR OPERATOR) TO INCLUDE SPACING ORDER 196059 FOR THE CLVD, SECTION IS DOUBLE SPACED AND BOTH ORDERS ARE VALID
MEMO	7/14/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 189381	7/19/2017 - G60 - (640) 14-14N-21W EXT 176462 CLVD, OTHERS
SPACING - 196059	7/19/2017 - G60 - (640) 14-14N-21W EXT 133031/176462 CLVD, OTHERS EXT OTHERS

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

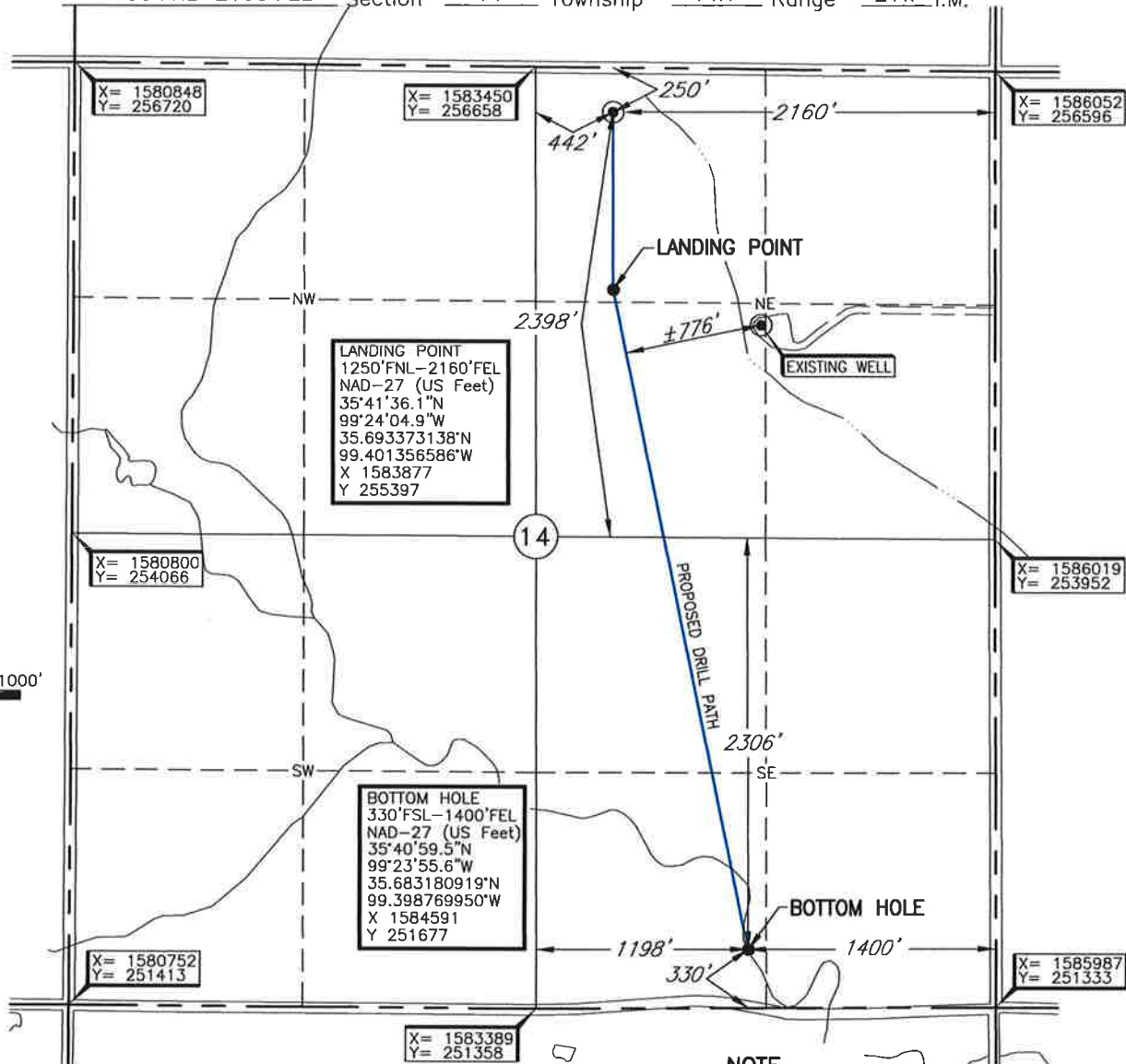
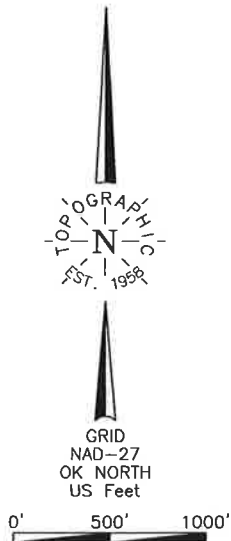
6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 • LOCAL (405) 843-4847 • OUT OF STATE (800) 654-3219
 Certificate of Authorization No. 1293 LS

3512924106

ROGER MILLS

County, Oklahoma

250'FNL-2160'FEL Section 14 Township 14N Range 21W I.M.



LANDING POINT
 1250'FNL-2160'FEL
 NAD-27 (US Feet)
 35°41'36.1"N
 99°24'04.9"W
 35.693373138°N
 99.401356586°W
 X 1583877
 Y 255397

BOTTOM HOLE
 330'FSL-1400'FEL
 NAD-27 (US Feet)
 35°40'59.5"N
 99°23'55.6"W
 35.683180919°N
 99.398769950°W
 X 1584591
 Y 251677

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

LANDING POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

Operator: JMA ENERGY CO., LLC

Lease Name: BOAL

Well No.: 2-14H

ELEVATION:
1873' Gr. at Stake

Topography & Vegetation Loc. fell in sloped pasture, ±225' South of powerline.

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From North off county road.


Distance & Direction from Hwy Jct or Town From Hammon, Oklahoma, go ±4 miles North on St. Hwy 34, then ±1 mile West to the Northeast Corner of Section 14, T14N-R21W.

DATUM: NAD-27
 LAT: 35°41'46.0"N
 LONG: 99°24'04.9"W
 LAT: 35.696120365°N
 LONG: 99.401364037°W
 STATE PLANE
 COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1583889
 Y: 256397

Revision A Date of Drawing: July 28, 2017
 Invoice # 278969 Date Staked: Jan. 18, 2017 TR

CERTIFICATE:

I, Lee K. Goss an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein


 Oklahoma Lic. No. 1778

