

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

API NUMBER: 073 26352

Approval Date: 11/21/2018

Expiration Date: 05/21/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 15N Rge: 9W

County: KINGFISHER

SPOT LOCATION: ☐ SW ☐ SW ☐ SE ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 280 1490

Lease Name: MISS MARY

Well No: 5H-2722X

Well will be 280 feet from nearest unit or lease boundary.

Operator
Name: CIMAREX ENERGY CO

Telephone: 9185851100

OTC/OCC Number: 21194 0

CIMAREX ENERGY CO
202 S CHEYENNE AVE STE 1000
TULSA, OK 74103-3001

DOROTHY A. COFFEY
P.O. BOX 113
OKARCHE OK 73762

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (LESS CHESTER)	9638	6	
2	MISSISSIPPI SOLID	9950	7	
3			8	
4			9	
5			10	

Spacing Orders: 272944
652230

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201807690
201808395
201807687
201807691
201802159
201807688

Special Orders:

Total Depth: 20222

Ground Elevation: 1255

Surface Casing: 500

Depth to base of Treatable Water-Bearing FM: 370

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: 5000 Average: 3000

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: FLOWERPOT

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35464
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 22 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: NE NW NE NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 1680

Depth of Deviation: 9208

Radius of Turn: 477

Direction: 5

Total Length: 10265

Measured Total Depth: 20222

True Vertical Depth: 10157

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category

Description

BOTTOM-HOLE LOCATION

11/20/2018 - G75 - 150' FNL, 1680' FWL NW4 22-15N-9W PER REVISED STAKING PLAT

HYDRAULIC FRACTURING

11/14/2018 - 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: 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: FRACFOCUS.ORG

INTERMEDIATE CASING

11/14/2018 - 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

PENDING CD - 201802159

11/19/2018 - G75 - CONFIRM 652230 AFTER FAILURE TO NOTICE CERTAIN RESPONDENTS REC 11-20-2018 (MILLER)

PENDING CD - 201807687

11/20/2018 - G75 - 27-15N-9W
X272944 MSSSD
3 WELLS
NO OP. NAMED
REC 10-15-2018 (THOMAS)

PENDING CD - 201807688

11/20/2018 - G75 - 22-15N-9W
X652230 MSNLC **
3 WELLS
NO OP. NAMED
REC 10-15-2018 (THOMAS)

** S/B X652230/201802159 MSNLC 22-15N-9W; TO BE CORRECTED IN ORDER SUBMITTED TO OCC FOR REVIEW PER ATTORNEY FOR OPERATOR

This permit does not address the right of entry or settlement of surface damages.

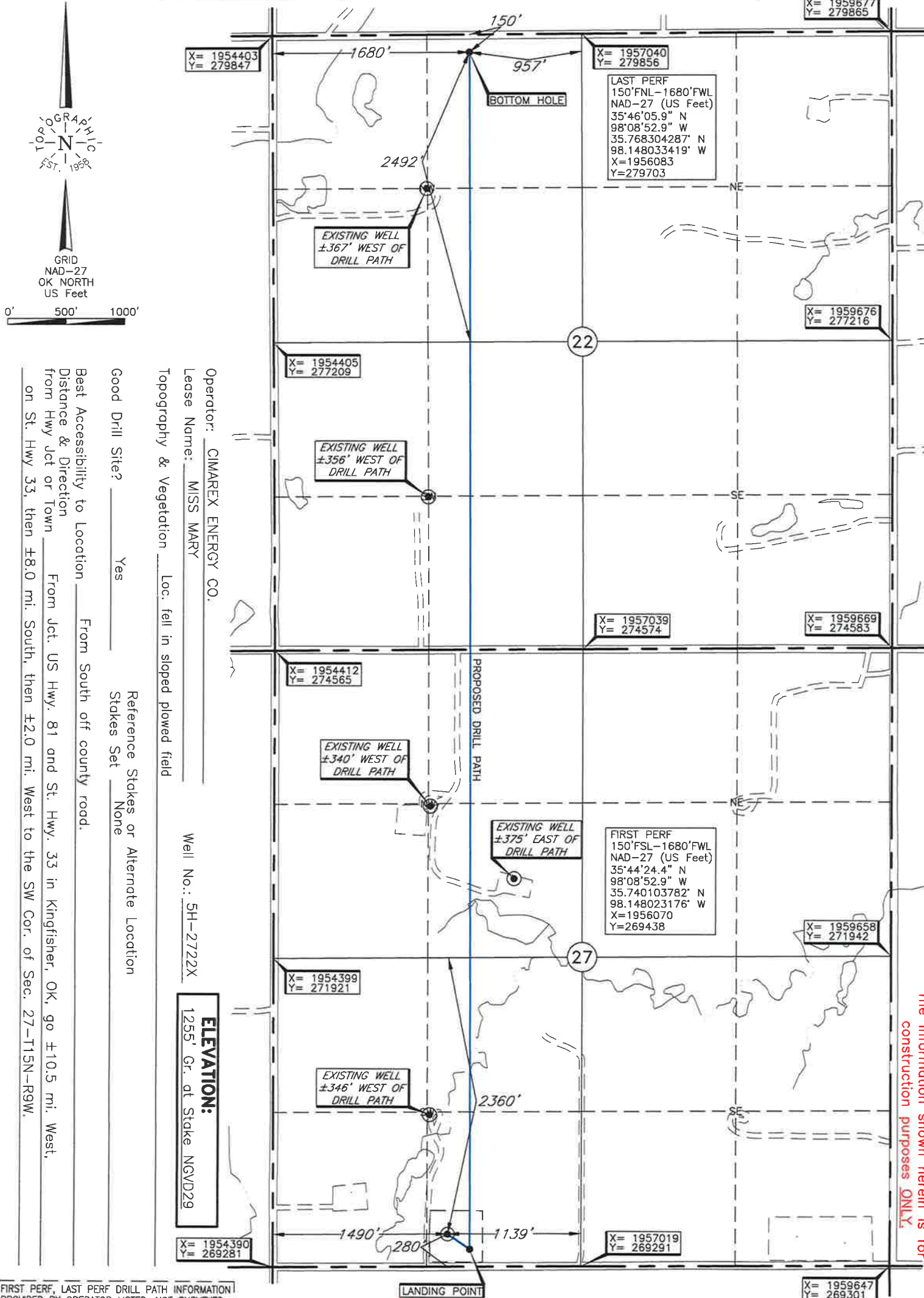
073 26352 MISS MARY 5H-2722X

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.

Category	Description
PENDING CD - 201807690	<p>11/20/2018 - G75 - (I.O.) 27 & 22-15N-9W X272944 MSSSD 27-15N-9W X652230 MSNLC 22-15N-9W ** COMPL. INT. (27-15N-9W) NCT 150' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (22-15N-9W) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL CIMAREX ENERGY CO. REC 10-15-2018 (THOMAS)</p> <p>** S/B X652230/201802159 MSNLC 22-15N-9W; TO BE CORRECTED IN ORDER SUBMITTED TO OCC FOR REVIEW PER ATTORNEY FOR OPERATOR</p>
PENDING CD - 201807691	<p>11/20/2018 - G75 - (I.O.) 27 & 22-15N-9W EST MULTIUNIT HORIZONTAL WELL X272944 MSSSD 27-15N-9W X652230 MSNLC 22-15N-9W ** 50% 27-15N-9W 50% 22-15N-9W CIMAREX ENERGY CO. REC 10-15-2018 (THOMAS)</p> <p>** S/B X652230/201802159 MSNLC 22-15N-9W; TO BE CORRECTED IN ORDER SUBMITTED TO OCC FOR REVIEW PER ATTORNEY FOR OPERATOR</p>
PENDING CD - 201808395	<p>11/20/2018 - G75 - (I.O.) 27-15N-9W X165:10-3-28(C)(2)(B) MSSSD (MISS MARY 5H-2722X) MAY BE CLOSER THAN 600' TO SOUTHWEST TITLE 1 (API 073-24048) ** CIMAREX ENERGY CO. REC 11-5-2018 (DENTON)</p> <p>** S/B MAY BE CLOSER THAN 600' TO ALIG "R" 1-27 (API 073-24557); TO BE CORRECTED IN ORDER SUBMITTED TO OCC FOR REVIEW PER ATTORNEY FOR OPERATOR</p>
SPACING - 272944	<p>11/19/2018 - G75 - (640) 27-15N-9W EXT 166936 MSSSD, OTHERS EXT OTHERS</p>
SPACING - 652230	<p>11/19/2018 - G75 - (640)(HOR) 22-15N-9W EXT 642657 MSNLC, OTHERS COMPL. INT. NLT 660' FB</p>

280'FSL - 1490'FWL Section 27 Township 15N Range 9W I.M.



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

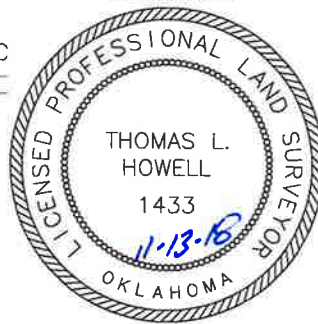
FIRST PERF, LAST PERF, DRILL PATH INFORMATION
PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

Revision ☒ B Date of Drawing: Nov. 12, 2018
Invoice # 302446A Date Staked: Sep. 14, 2018 AC

CERTIFICATE:

I, 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

Thomas L. Howell
Oklahoma Lic. No. 1433



DATUM: NAD-27
LAT: 35°44'25.6\"N
LONG: 98°08'55.2\"W
LAT: 35.740457560°N
LONG: 98.148662514°W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1955881
Y: 269567

was
GPS receiver
with a
horizontal
accuracy
of 1 ft
or better
at 95%
confidence
level