

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

API NUMBER: 051 24505

Approval Date: 10/26/2018

Expiration Date: 04/26/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 10 Twp: 5N Rge: 6W

County: GRADY

SPOT LOCATION: ☐ NE ☐ NE ☐ NE ☐ SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 2378 304

Lease Name: CORA MAE 0506

Well No: 10-15-1MH

Well will be 304 feet from nearest unit or lease boundary.

Operator Name: CAMINO NATURAL RESOURCES LLC

Telephone: 7204052706

OTC/OCC Number: 24097 0

CAMINO NATURAL RESOURCES LLC
1401 17TH ST STE 1000
DENVER, CO 80202-1247

ANTHONY LYNN GRAHAM
920 NORTH HUNT
HYDRO OK 73048

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN(ABOVE SYCAMORE)	16013	6	
2	SYCAMORE	16054	7	
3			8	
4			9	
5			10	

Spacing Orders: 201807135
678919
201807136

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201807137

Special Orders:

Total Depth: 24244

Ground Elevation: 1061

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 180

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: ON SITE

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 located in a Hydrologically Sensitive Area.

Category of Pit: 2

Liner not required for Category: 2

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

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

PERMIT NO: 18-35509

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: ON SITE

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: 3

Liner required for Category: 3

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec 15 Twp 5N Rge 6W County GRADY

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 100

Feet From: EAST 1/4 Section Line: 380

Depth of Deviation: 15625

Radius of Turn: 511

Direction: 181

Total Length: 7817

Measured Total Depth: 24244

True Vertical Depth: 16130

End Point Location from Lease,
Unit, or Property Line: 100

Notes:

Category

Description

DEEP SURFACE CASING

10/19/2018 - GA8 - 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

10/19/2018 - GA8 - 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

MEMO

10/19/2018 - GA8 - MIN. 20-MIL PIT LINER REQUIRED, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201807135

10/26/2018 - G58 - (640)(HOR) 10-5N-6W
EST MSPAS
POE TO BHL NCT 660' FB
REC 9/28/2018 (THOMAS)

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.

051 24505 CORA MAE 0506 10-15-1MH

Category	Description
PENDING CD - 201807136	10/26/2018 - G58 - (640)(HOR) 15-5N-6W AMND 663546 MSSP TO MSPAS EXT 678919 SCMR POE TO BHL (MSPAS, SCMR) NCT 660' FB REC 9/28/2018 (THOMAS)
PENDING CD - 201807137	10/26/2018 - G58 - (I.O.) 10 & 15-5N-6W EST MULTIUNIT HORIZONTAL WELL X201807135 MSPAS 10-5N-6W X678919 SCMR 10-5N-6W X663546/201807136 MSPAS, SCMR 15-5N-6W (SCMR IS ADJACENT COMMON SOURCE OF SUPPLY TO MSPAS) 34% 10-5N-6W 66% 15-5N-6W NO OP. NAMED REC 9/28/2018 (THOMAS)
PENDING CD - 201807138	10/26/2018 - G58 - (I.O.) 10 & 15-5N-6W X201807135 MSPAS 10-5N-6W X678919 SCMR 10-5N-6W X663546/201807136 MSPAS, SCMR 15-5N-6W COMPL. INT. 10-5N-6W NCT 2640' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. 15-5N-6W NCT 0' FNL, NCT 165' FSL, NCT 330' FEL NO OP. NAMED REC 9/28/2018 (THOMAS)
SPACING - 663546	10/26/2018 - G58 - (640)(HOR) 15-5N-6W VAC 461011 CNEY, SCMR EXT 655989 MSSP (AMND TO MSPAS BY 201807136) POE TO BHL NCT 660' FB
SPACING - 678919	10/26/2018 - G58 - (640)(HOR) 10-5N-6W EXT 655144 SCMR, OTHERS POE TO BHL NCT 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.

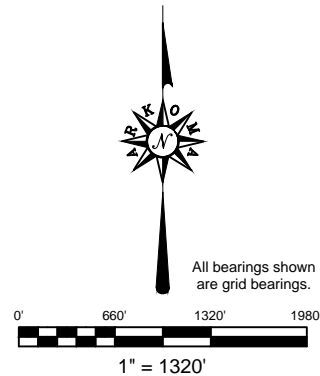
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.



Well Location Plat

S.H.L. Sec. 10-5N-6W I.M.
B.H.L. Sec. 15-5N-6W I.M.

Operator: CAMINO NATURAL RESOURCES, LLC
Lease Name and No.: CORA MAE 0506 10-15-1MH
Footage: 2378' FSL - 304' FEL Gr. Elevation: 1061' 051-24505
Section: 10 Township: 5N Range: 6W I.M.
County: Grady State of Oklahoma
Terrain at Loc.: Location fell in an open pasture with a pond on the South side of the location to be filled in.



GPS DATUM
NAD 83
NAD 27
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 34°55'11.20"N
Lon: 97°48'45.32"W
X: 2024682
Y: 577400

Surface Hole Loc.:
Lat: 34°55'10.95"N
Lon: 97°48'44.18"W
X: 2056278
Y: 577358

First Perf:
Lat: 34°55'13.77"N
Lon: 97°48'46.23"W
X: 2024606
Y: 577659

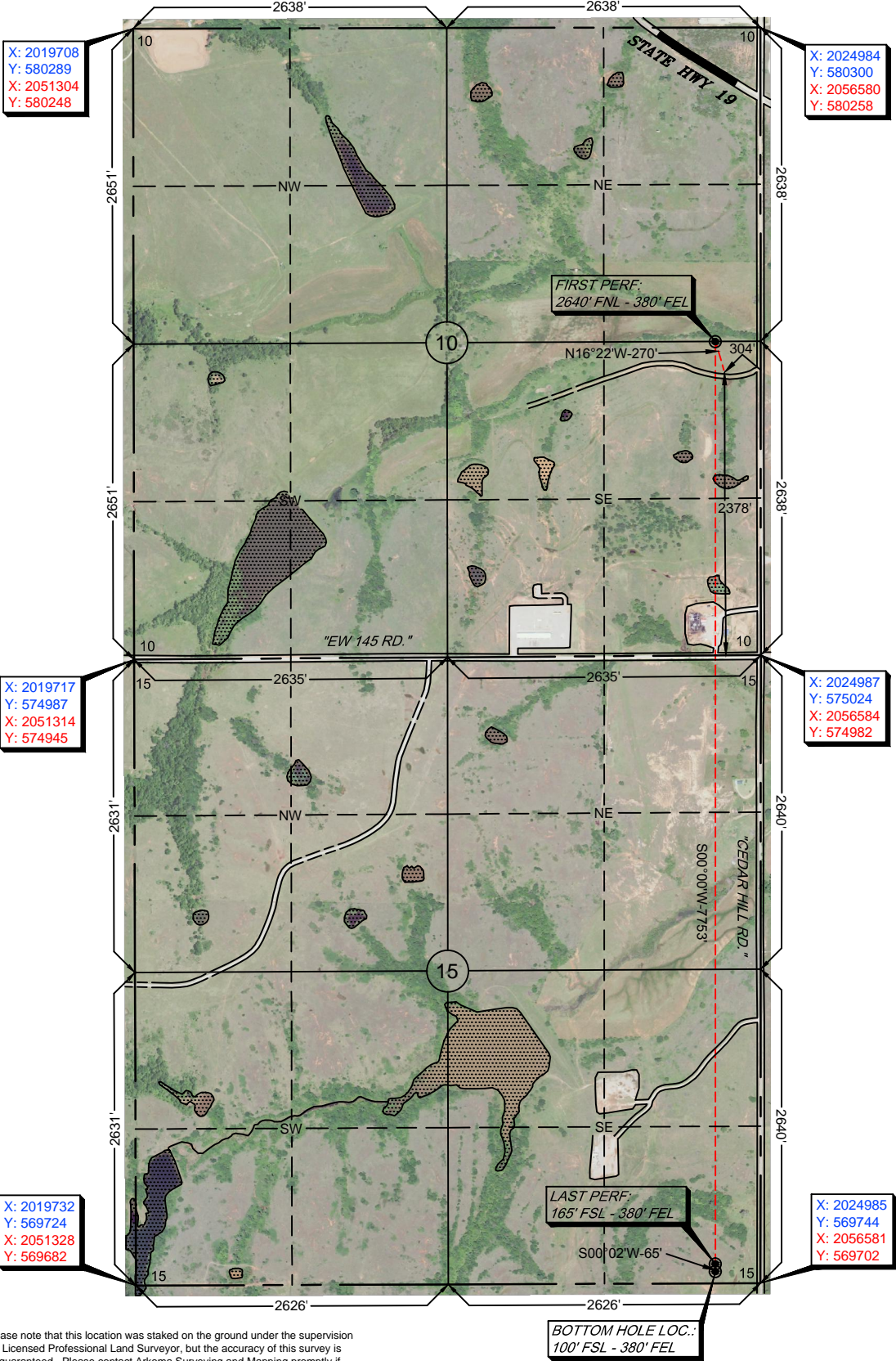
First Perf:
Lat: 34°55'13.52"N
Lon: 97°48'45.09"W
X: 2056202
Y: 577617

Last Perf:
Lat: 34°53'57.10"N
Lon: 97°48'46.41"W
X: 2024605
Y: 569907

Last Perf:
Lat: 34°53'56.85"N
Lon: 97°48'45.27"W
X: 2056201
Y: 569866

Bottom Hole Loc.:
Lat: 34°53'56.45"N
Lon: 97°48'46.41"W
X: 2024605
Y: 569842

Bottom Hole Loc.:
Lat: 34°53'56.20"N
Lon: 97°48'45.28"W
X: 2056201
Y: 569801



-Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.
-NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.
-Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.

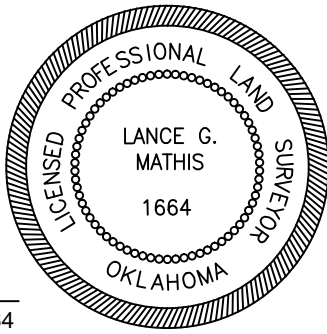
Survey and plat by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2020
Invoice #8020
Date Staked: 07/31/18 By: H.S.
Date Drawn: 08/06/18 By: J.K.
Revise Lease Name: 08/17/18 By: C.K.
Revise Surface Hole Loc.: 09/07/18 By: R.S.

Certification:

This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

LANCE G. MATHIS

09/07/18
OK LPLS 1664





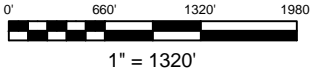
Well Location Plat

S.H.L. Sec. 10-5N-6W I.M.
B.H.L. Sec. 15-5N-6W I.M.

Operator: CAMINO NATURAL RESOURCES, LLC
Lease Name and No.: CORA MAE 0506 10-15-1MH
Footage: 2378' FSL - 304' FEL Gr. Elevation: 1061' 051-24505
Section: 10 Township: 5N Range: 6W I.M.
County: Grady State of Oklahoma
Terrain at Loc.: Location fell in an open pasture with a pond on the South side of the location to be filled in.



All bearings shown
are grid bearings.



GPS DATUM
NAD 83
NAD 27
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 34°55'11.20"N
Lon: 97°48'45.32"W
X: 2024682
Y: 577400

Surface Hole Loc.:
Lat: 34°55'10.95"N
Lon: 97°48'44.18"W
X: 2056278
Y: 577358

First Perf:
Lat: 34°55'13.77"N
Lon: 97°48'46.23"W
X: 2024606
Y: 577659

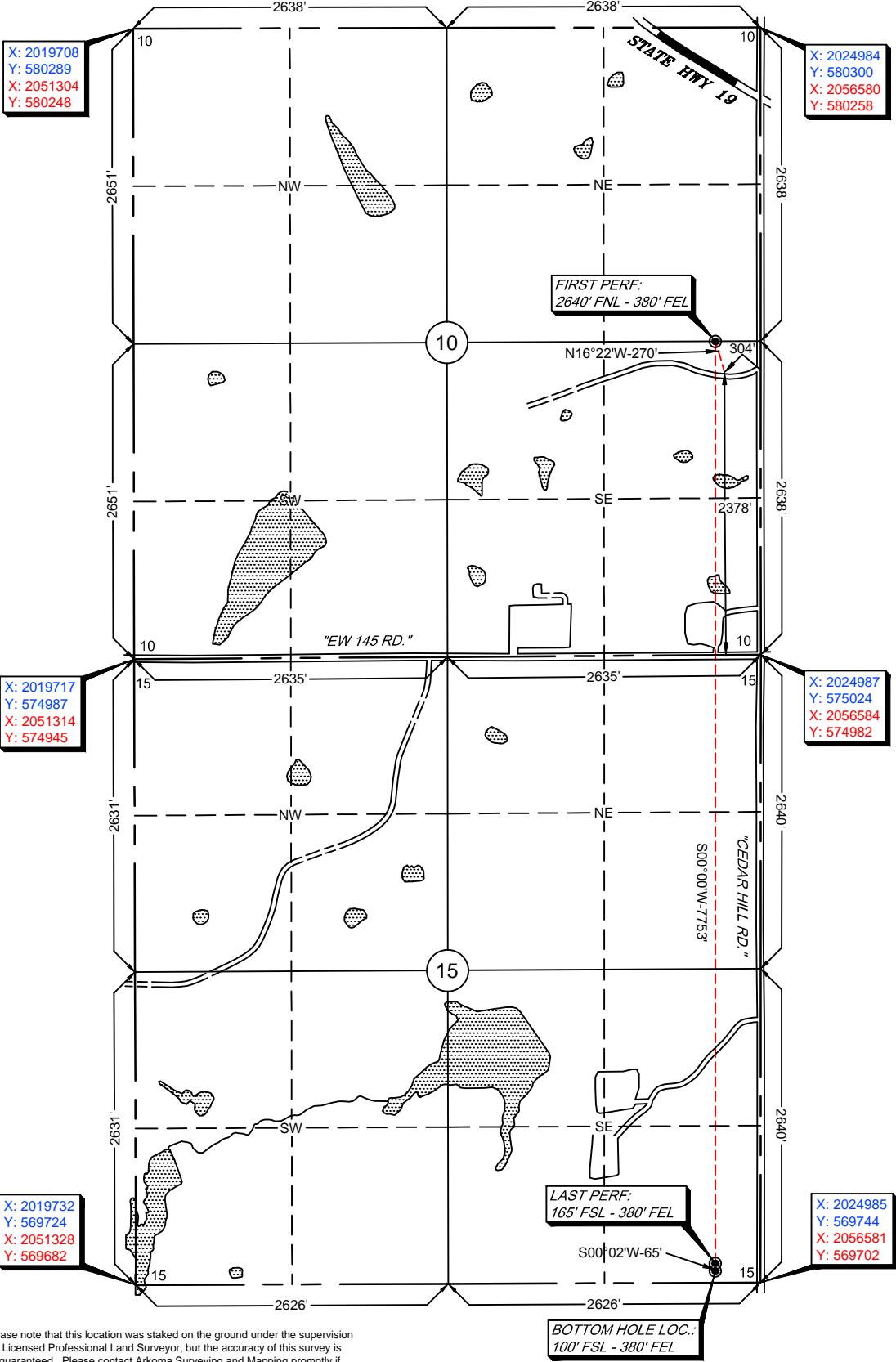
First Perf:
Lat: 34°55'13.52"N
Lon: 97°48'45.09"W
X: 2056202
Y: 577617

Last Perf:
Lat: 34°53'57.10"N
Lon: 97°48'46.41"W
X: 2024605
Y: 569907

Last Perf:
Lat: 34°53'56.85"N
Lon: 97°48'45.27"W
X: 2056201
Y: 569866

Bottom Hole Loc.:
Lat: 34°53'56.45"N
Lon: 97°48'46.41"W
X: 2024605
Y: 569842

Bottom Hole Loc.:
Lat: 34°53'56.20"N
Lon: 97°48'45.28"W
X: 2056201
Y: 569801



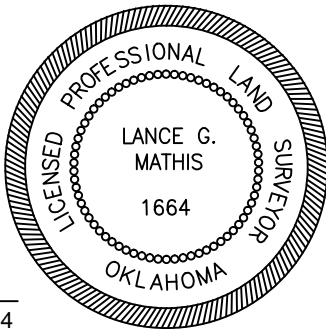
-Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.
-NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.
-Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.

Survey and plat by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2020
Invoice #8020
Date Staked: 07/31/18 By: H.S.
Date Drawn: 08/06/18 By: J.K.
Revise Lease Name: 08/17/18 By: C.K.
Revise Surface Hole Loc.: 09/07/18 By: R.S.

Certification:
This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

LANCE G. MATHIS

09/07/18
OK LPLS 1664

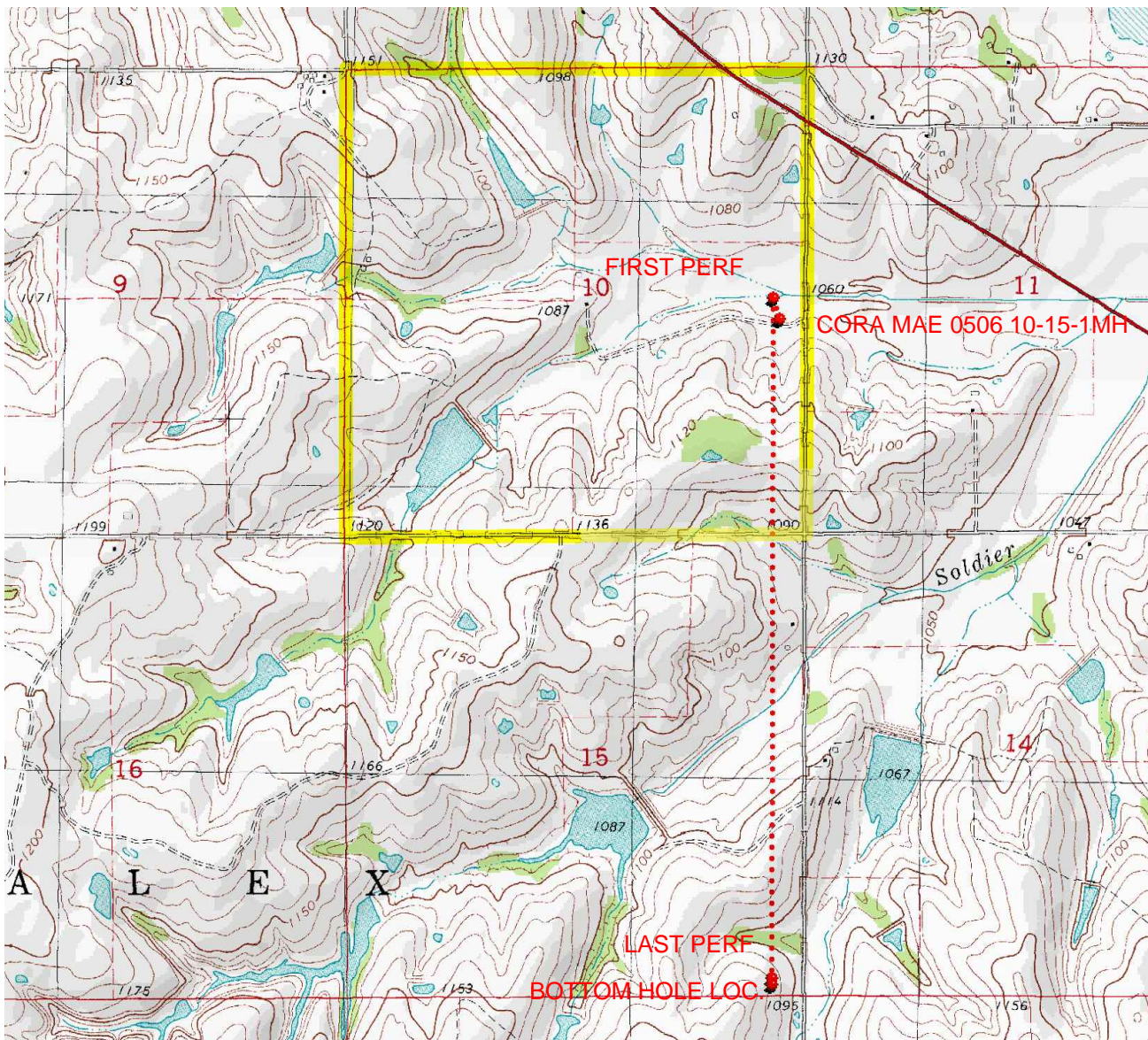


Operator: CAMINO NATURAL RESOURCES, LLC
Lease Name and No.: CORA MAE 0506 10-15-1MH
Surface Hole Location: 2378' FSL - 304' FEL
First Perf: 2640' FNL - 380' FEL
Sec. 10 Twp. 5N Rng. 6W I.M.
Last Perf: 165' FSL - 380' FEL
Bottom Hole Location: 100' FSL - 380' FEL
Sec. 15 Twp. 5N Rng. 6W I.M.
County: Grady State of Oklahoma



Scale 1" = 2000'
Contour Interval: 10'

Ground Elevation at Surface Hole Location: 1061'



Provided by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030

Certificate of Authorization No. 5348
Expires June 30, 2020

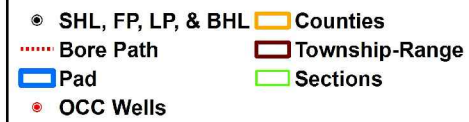
Date Staked: 07/31/18

The purpose of this map is to verify the location and elevation as staked on the ground and to show the surrounding Topographic features. The footage shown hereon is only as SCALED onto a U.S.G.S. Topographic Map.

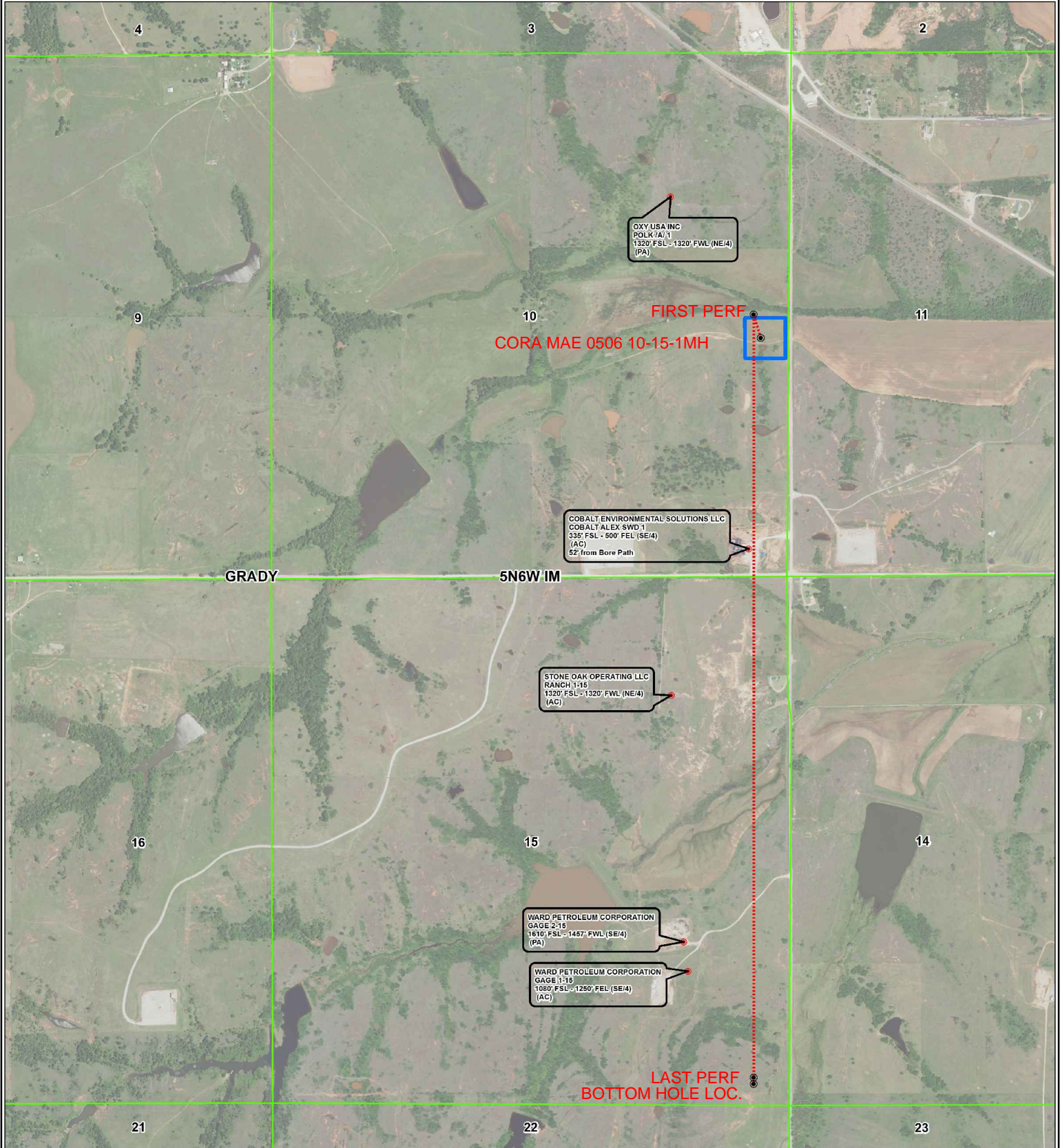
Please note that this location was staked carefully on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed.

Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined.

Operator: CAMINO NATURAL RESOURCES, LLC
Lease Name and No.: CORA MAE 0506 10-15-1MH
Surface Hole Location: 2378' FSL - 304' FEL
First Perf: 2640' FNL - 380' FEL
Sec. 10 Twp. 5N Rng. 6W I.M.
Last Perf: 165' FSL - 380' FEL
Bottom Hole Location: 100' FSL - 380' FEL
Sec. 15 Twp. 5N Rng. 6W I.M.
County: Grady State of Oklahoma



0 750 1,500
Feet



County Highway Vicinity Map

CAMINO

Job #: 8020

Operator: CAMINO NATURAL RESOURCES, LLC

Lease Name and No.: CORA MAE 0506 10-15-1MH

Accessibility: From the South.

Directions: From the junction of "Main St" & State HWY 19 in the town of Alex, OK, go 2.1 miles North on State HWY 19, then go 0.4 miles South on "Cedar Hill Rd" to the Southeast Quarter of Section 10-5N-6W on the West side of the road.



1 inch = 0.5 mile

provided by,
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2018

