

API NUMBER: 087 22355 A

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

Approval Date: 05/05/2022

Expiration Date: 11/05/2023

Multi Unit Oil & Gas

Amend reason: SHL REVISION

AMEND PERMIT TO DRILL

WELL LOCATION: Section: 33 Township: 7N Range: 2W County: MCCLAIN

SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 282 1675

Lease Name: KENT MU16 28-21 Well No: 3HX Well will be 282 feet from nearest unit or lease boundary.

Operator Name: LRR IV OPERATING INC Telephone: 7132929535 OTC/OCC Number: 24554 0

LRR IV OPERATING INC
1111 BAGBY STREET STE 4600
HOUSTON, TX 77002

BILL & LINDA HOGUE
3118 S. 9TH
PURCELL OK 73080

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

Name	Code	Depth
1 WOODFORD	319WDFD	7600

Spacing Orders: 686256
724709

Location Exception Orders: 724690

Increased Density Orders: No Density

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special

Total Depth: 18502

Ground Elevation: 1101

Surface Casing: 380

Depth to base of Treatable Water-Bearing FM: 250

Under Federal Jurisdiction: No
Fresh Water Supply Well Drilled: No
Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids:

F. Haul to Commercial soil farming facility	Sec. 1 Twn. 7S Rng. 3E Cnty. 85 Order No: 549455
H. (Other)	SEE MEMO

PIT 1 INFORMATION

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is: BED AQUIFER

Pit Location Formation: PURCELL

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: PURCELL

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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.

MULTI UNIT HOLE 1

Section: 21	Township: 7N	Range: 2W	Meridian: IM	Total Length: 10248
County: MCCLAIN				Measured Total Depth: 18502
Spot Location of End Point: N2	N2	NW	NE	True Vertical Depth: 7600
Feet From: NORTH	1/4 Section Line: 65		End Point Location from	
Feet From: EAST	1/4 Section Line: 1980		Lease, Unit, or Property Line: 65	

NOTES:

Category	Description
HYDRAULIC FRACTURING	<p>[4/26/2022 - GC2] - OCC 165:10-3-10 REQUIRES:</p> <p>1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;</p> <p>2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,</p> <p>3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG</p>
LOCATION EXCEPTION - 724690	<p>[5/2/2022 - G56] - (I.O.) 21 & 28-7N-2W X686256 WDFD COMPL INT (21-7N-7W) NCT 0' FSL, NCT 165' FNL, NCT 660' FEL COMPL INT (28-7N-2W) NCT 165' FSL, NCT 0' FNL, NCT 660' FEL LRR IV OP INC 4/5/2022</p>
MEMO	[4/26/2022 - GC2] - CLOSED SYSTEM=STEEL PITS (REQUIRED - WALNUT CREEK), OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 686256	<p>[5/2/2022 - G56] - (640)(HOR) 21 & 28-7N-2W EST WDFD, OTHERS POE TO BHL NCT 165' FNL/FSL, NCT 330' FEL/FWL</p>
SPACING - 724709	<p>[5/2/2022 - G56] - (I.O.) 21 & 28-7N-2W EST MULTIUNIT HORIZONTAL WELL X686256 WDFD 50% 21-7N-7W 50% 28-7N-2W LRR IV OP INC 4/6/2022</p>



Well Location Plat

S.H.L. Sec. 33-7N-2W I.M.
B.H.L. Sec. 21-7N-2W I.M.

Operator: LIME ROCK RESOURCES

Lease Name and No.: KENT MU16 28-21 3HX

Surface Hole Location: 282' FNL - 1675' FEL Gr. Elevation: 1101'

NW/4-NE/4-NW/4-NE/4 Section: 33 Township: 7N Range: 2W I.M.

Bottom Hole Location: 65' FNL - 1980' FEL

NW/4-NE/4-NW/4-NE/4 Section: 21 Township: 7N Range: 2W I.M.

County: McClain State of Oklahoma

Terrain at Loc.: Location fell in on existing pad site.



All bearings shown
are grid bearings.

0' 660' 1320' 1980'
1" = 1500'

GPS DATUM

NAD 83

NAD 27

OK SOUTH ZONE

Surface Hole Loc.:
Lat: 35°02'36.60"N
Lon: 97°24'43.09"W
Lat: 35.04349978
Lon: -97.41197058
X: 2144516
Y: 622890

Surface Hole Loc.:
Lat: 35°02'36.34"N
Lon: 97°24'41.99"W
Lat: 35.04342910
Lon: -97.41166297
X: 2176112
Y: 622847

Kick Off Point:
Lat: 35°02'38.06"N
Lon: 97°24'46.76"W
Lat: 35.04390600
Lon: -97.41298987
X: 2144210
Y: 623036

Kick Off Point:
Lat: 35°02'37.81"N
Lon: 97°24'45.66"W
Lat: 35.04383534
Lon: -97.41268224
X: 2175806
Y: 622993

First Take Point:
Lat: 35°02'41.03"N
Lon: 97°24'46.77"W
Lat: 35.04473026
Lon: -97.41299123
X: 2144208
Y: 623336

First Take Point:
Lat: 35°02'40.77"N
Lon: 97°24'45.66"W
Lat: 35.04465961
Lon: -97.41268358
X: 2175804
Y: 623293

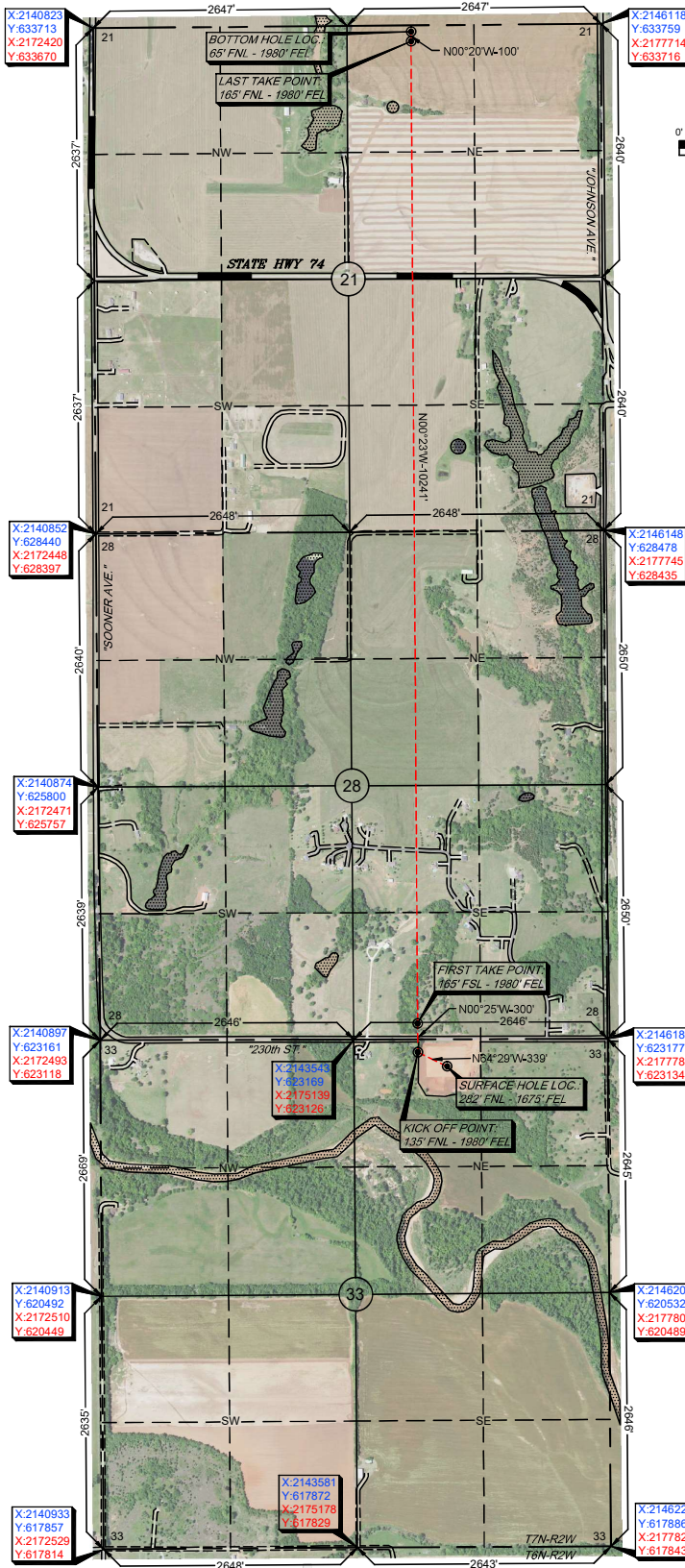
Last Take Point:
Lat: 35°04'22.32"N
Lon: 97°24'46.88"W
Lat: 35.07286690
Lon: -97.41302175
X: 2144139
Y: 633577

Last Take Point:
Lat: 35°04'22.07"N
Lon: 97°24'45.77"W
Lat: 35.07279681
Lon: -97.41271368
X: 2175735
Y: 633534

Bottom Hole Loc.:
Lat: 35°04'23.31"N
Lon: 97°24'46.88"W
Lat: 35.07314165
Lon: -97.41302174
X: 2144138
Y: 633677

Bottom Hole Loc.:
Lat: 35°04'23.06"N
Lon: 97°24'45.77"W
Lat: 35.07307156
Lon: -97.41271367
X: 2175735
Y: 633634

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 you have any questions or concerns. This plat is for informational purposes only. NOTE: X and Y data shown herein 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 other reliable source. All distances are in feet. All bearings are grid bearings, 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, 2022

Invoice #8990-B

Date Staked: 04/22/2022 By: G.G.

Date Drawn: 11/15/2021 By: J.L.

Add Elev.: 04/25/2022 By: R.M.

Revised SHL: 05/24/2022 By: J.L.

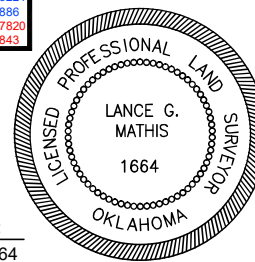
Certification:

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
LANCE G. MATHIS

05/24/2022

OK LPLS 1664





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B.H.L. Sec. 21-7N-2W I.M.

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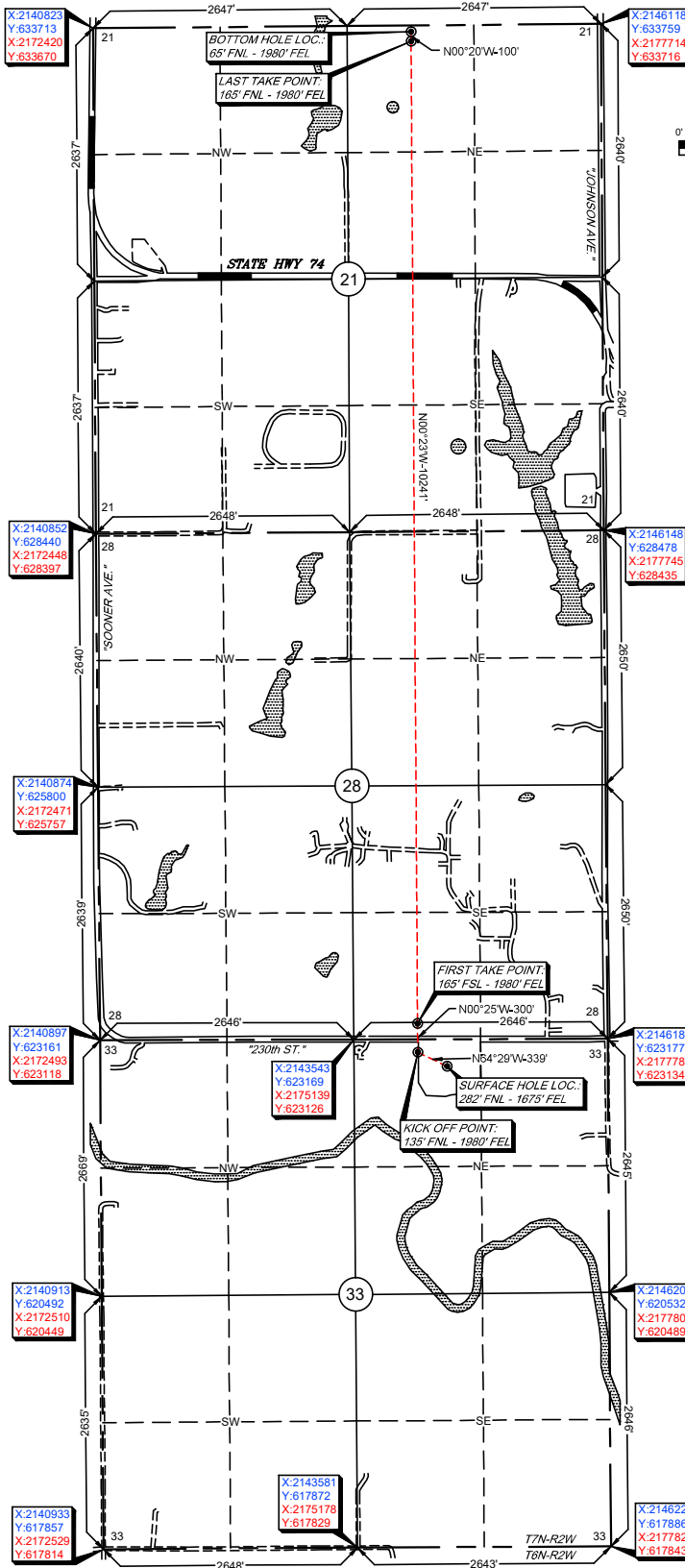
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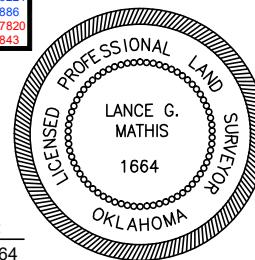
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OK LPLS 1664

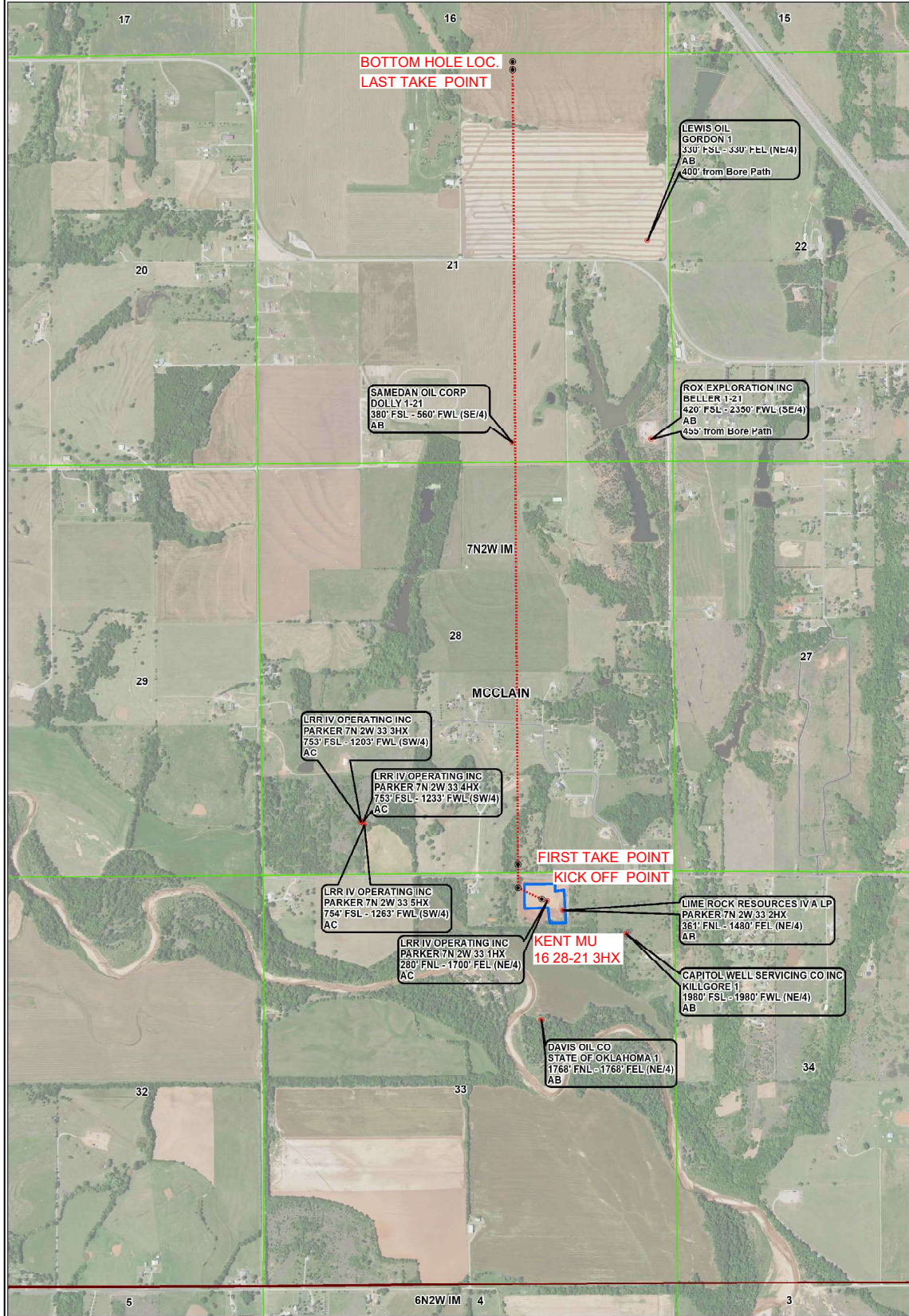
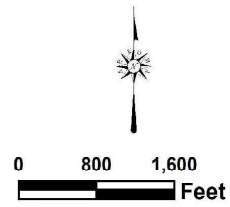
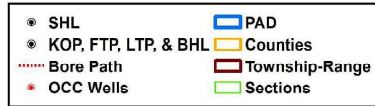




Anti-Collision

Operator: LIME ROCK RESOURCES
Lease Name and No.: KENT MU16 28-21 3HX
Surface Hole Location: 282' FNL - 1675' FEL
Kick Off Point: 135' FNL - 1980' FEL
Sec. 33 Twp. 7N Rng. 2W I.M.
First Take Point: 165' FSL - 1980' FEL
Sec. 28 Twp. 7N Rng. 2W I.M.
Last Take Point: 165' FNL - 1980' FEL
Bottom Hole Location: 65' FNL - 1980' FEL
Sec. 21 Twp. 7N Rng. 2W I.M.
County: McClain State of Oklahoma

Sec.(s) 21, 28, & 33-7N-2W I.M.



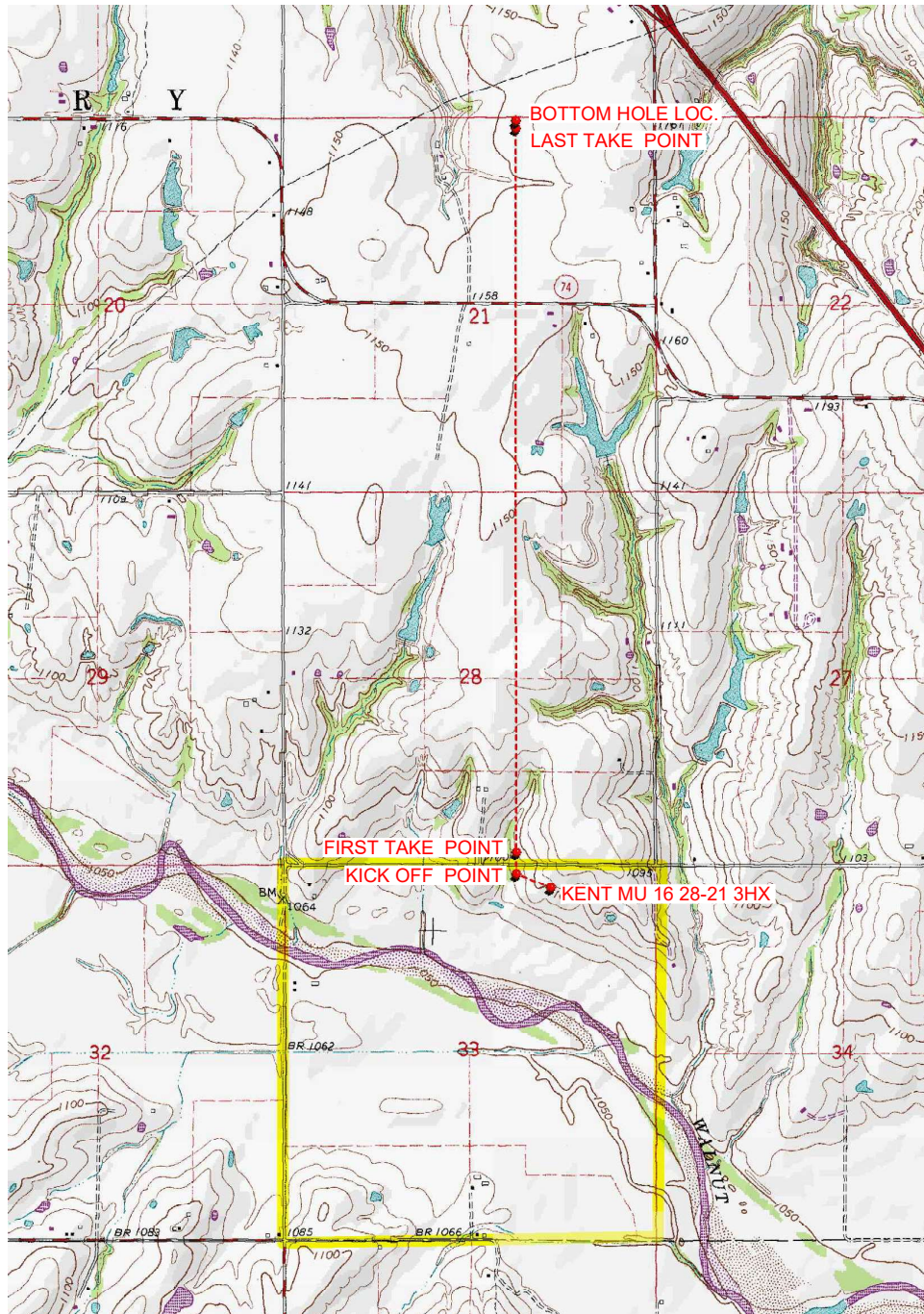


Topographic Vicinity Map

Operator: LIME ROCK RESOURCES
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Sec. 21 Twp. 7N Rng. 2W I.M.
County: McClain State of Oklahoma
Ground Elevation at Surface Hole Location: 1101'



Scale 1" = 2000'
Contour Interval: 10'



Provided by:
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Certificate of Authorization No. 5348
Expires June 30, 2022

Date Staked: 04/22/2022

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.

provided by,
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