

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

API NUMBER: 121 24835

Approval Date: 12/07/2018

Expiration Date: 06/07/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 28 Twp: 8N Rge: 18E

County: PITTSBURG

SPOT LOCATION: ☐ SE ☐ NE ☐ SW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 1929 1074

Lease Name: SATTERFIELD

Well No: 4H-28

Well will be 1074 feet from nearest unit or lease boundary.

Operator Name: RED MOUNTAIN OPERATING LLC

Telephone: 4058424500

OTC/OCC Number: 23694 0

RED MOUNTAIN OPERATING LLC
5901 N WESTERN AVE
OKLAHOMA CITY, OK 73118-1253

DENNIS SATTERFIELD
P O BOX 284
QUINTON OK 74561

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	7199	6	
2	MAYES	7511	7	
3	WOODFORD	7651	8	
4	HUNTON	7713	9	
5			10	

Spacing Orders: 679486

Location Exception Orders: 684694

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 16245

Ground Elevation: 1020

Surface Casing: 320

Depth to base of Treatable Water-Bearing FM: 270

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: 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 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: BOGGY

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

PERMIT NO: 18-35676

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 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: BOGGY

HORIZONTAL HOLE 1

Sec 33 Twp 8N Rge 18E County PITTSBURG

Spot Location of End Point: S2 S2 S2 S2

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 2640

Depth of Deviation: 7151

Radius of Turn: 826

Direction: 175

Total Length: 7796

Measured Total Depth: 16245

True Vertical Depth: 7713

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

Notes:

Category

Description

HYDRAULIC FRACTURING

11/6/2018 - 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: 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

LOCATION EXCEPTION - 684694

12/6/2018 - G58 - (I.O.) 28 & 33-8N-18E
X679486 MYES, WDFD, HNTN 28-8N-18E
X679487 MSSP, WDFD, HNTN 33-8N-18E
SHL 2640' FNL, 1500' FEL***
COMPL. INT. 28-8N-18E NCT 2640' FNL, NCT 0' FSL, NCT 1320' FEL
COMPL. INT. 33-8N-18E NCT 0' FNL, NCT 165' FSL, NCT 1320' FEL
RED MOUNTAIN OPERATING, LLC
10/10/2018

***PLAT SHOWS SHL AT 1929' FNL, 1074' FWL; WILL BE CORRECTED AT HEARING PER ATTORNEY FOR OP.

MEMO

11/6/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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.

121 24835 SATTERFIELD 4H-28

Category	Description
SPACING - 679486	12/6/2018 - G58 - (640)(HOR) 28-8N-18E EST MYES, WDFD, HNTN COMPL. INT. (MYES, HNTN) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL
SPACING - 679487	**SHOULD COEXIST WITH SP. ORDER 125682 HNTN; WILL FILE NPT PER ATTORNEY FOR OP. 12/6/2018 - G58 - (640)(HOR) 33-8N-18E EST OTHER EXT 665457 MSSP, WDFD, HNTN COMPL. INT. (MSSP, HNTN) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL (COEXIST SP. ORDER 125582** HNTN)
SPACING - 684614	**S/B SP. ORDER 125682 HNTN; WILL FILE NPT PER ATTORNEY FOR OP. 12/6/2018 - G58 - (I.O.) 28 & 33-8N-18E EST MULTIUNIT HORIZONTAL WELL X679486 MYES, WDFD, HNTN 28-8N-18E X679487 MSSP, WDFD, HNTN 33-8N-18E 33% 28-8N-18E 67% 33-8N-18E RED MOUNTAIN OPERATING, LLC 10/9/2018



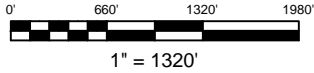
Well Location Plat

S.H.L. Sec. 28-8N-18E I.M.
B.H.L. Sec. 33-8N-18E I.M.

Operator: RED MOUNTAIN ENERGY, LLC
Lease Name and No.: SATTERFIELD 4H-28
Footage: 1929' FNL - 1074' FWL Gr. Elevation: 1020' 121-24835
Section: 28 Township: 8N Range: 18E I.M.
County: Pittsburg State of Oklahoma
Terrain at Loc.: Location fell on top of a hill slightly in trees.



All bearings shown
are geodetic bearings
unless noted.

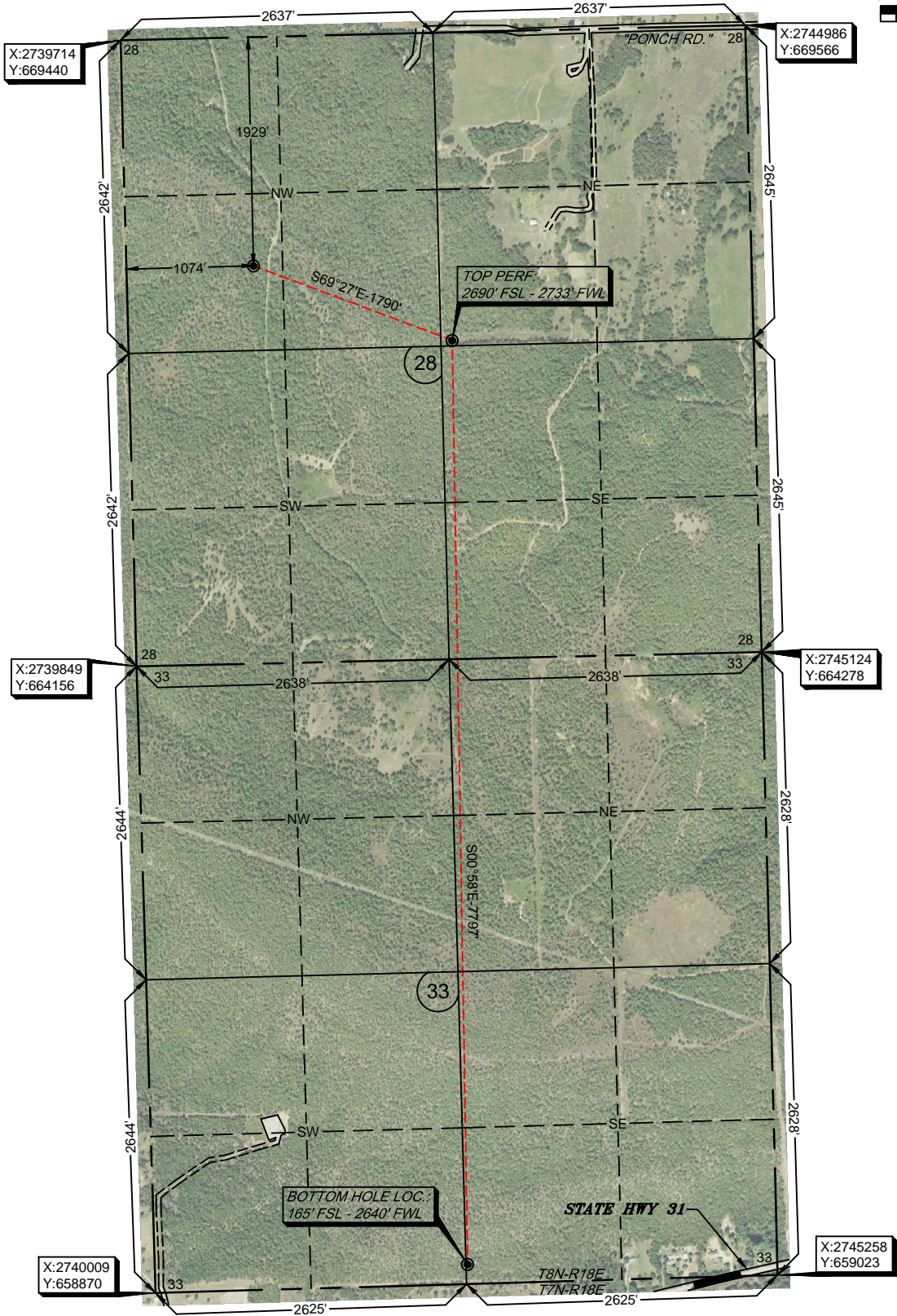


GPS DATUM
NAD 83
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 35°08'25.50"N
Lon: 95°24'59.44"W
Lat: 35.14041636
Lon: -95.41651039
X: 2740837
Y: 667536

Top Perf:
Lat: 35°08'18.86"N
Lon: 95°24'39.46"W
Lat: 35.13857353
Lon: -95.41096133
X: 2742513
Y: 666908

Bottom Hole Loc.:
Lat: 35°07'01.75"N
Lon: 95°24'40.30"W
Lat: 35.11715146
Lon: -95.41119362
X: 2742643
Y: 659112



-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

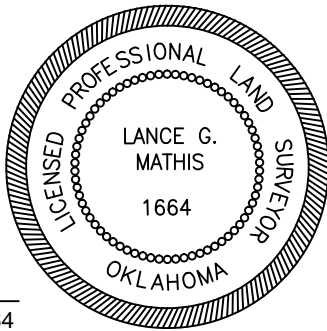
Invoice #7930-A-B
Date Staked: 10/05/18 By: M.G.
Date Drawn: 10/10/18 By: E.W.
Revise Perf: 11/02/18 By: D.B.

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

11/05/18
OK LPLS 1664





Well Location Plat

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B.H.L. Sec. 33-8N-18E I.M.

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Lease Name and No.: SATTERFIELD 4H-28
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Section: 28 Township: 8N Range: 18E I.M.
County: Pittsburg State of Oklahoma
Terrain at Loc.: Location fell on top of a hill slightly in trees.

121-24835



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are geodetic bearings
unless noted.

0' 660' 1320' 1980'

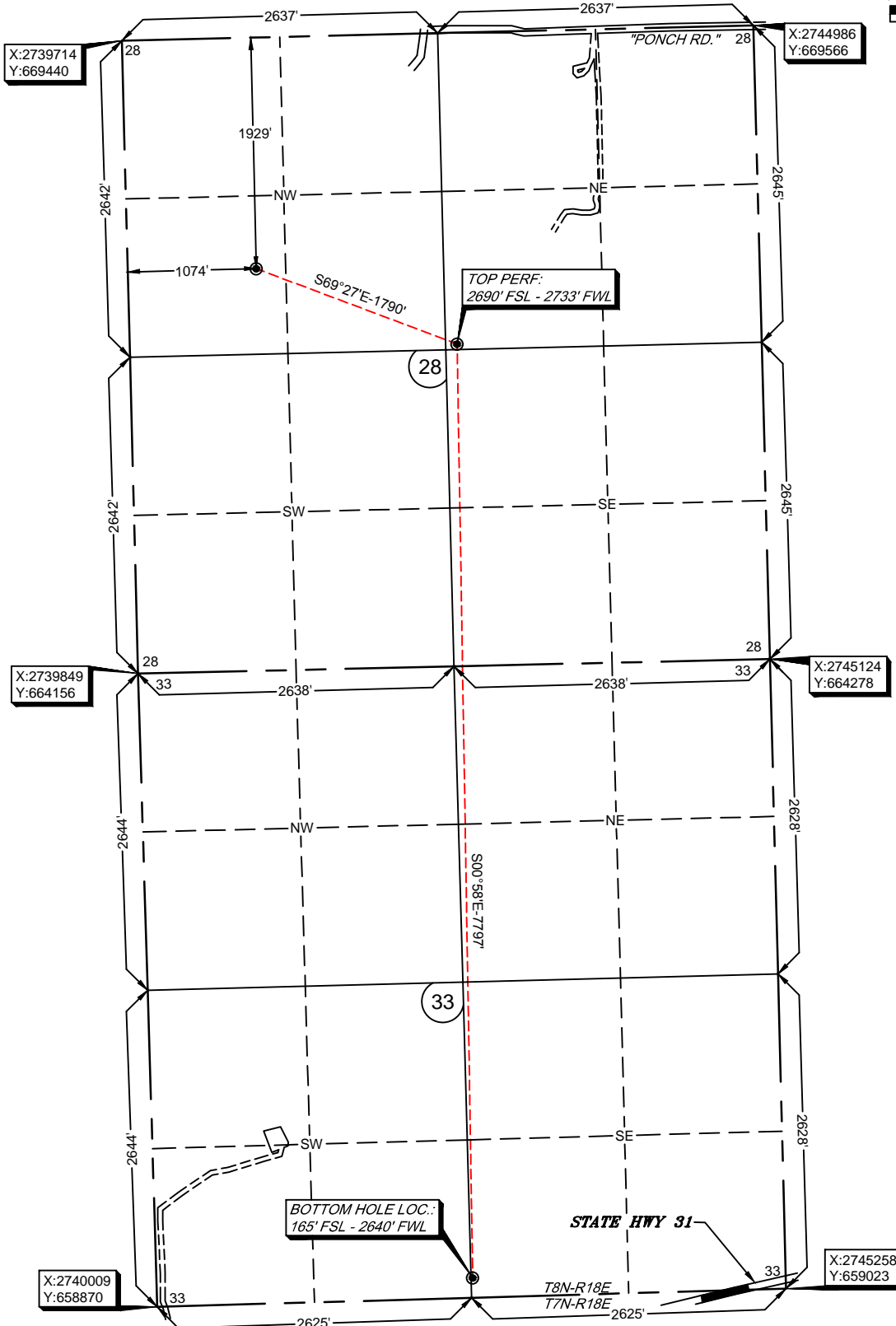
1" = 1320'

GPS DATUM
NAD 83
OK SOUTH ZONE

Surface Hole Loc.:
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Lon: 95°24'59.44"W
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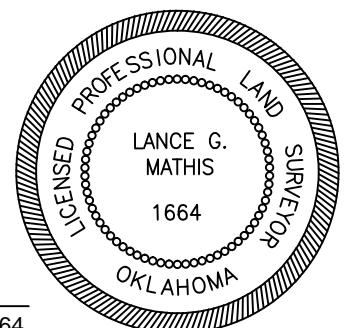
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LANCE G. MATHIS

11/05/18

OK LPLS 1664





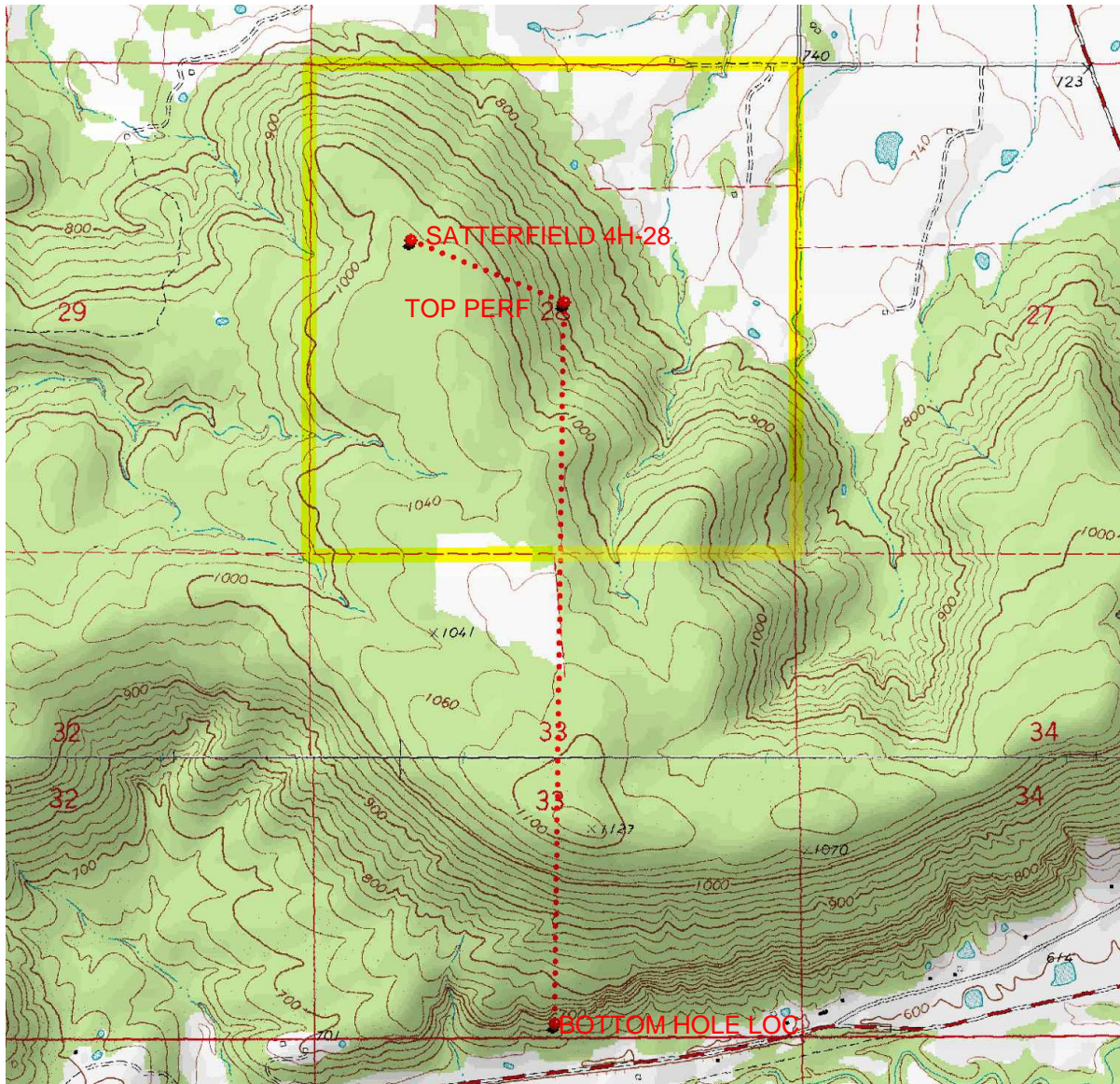
Topographic Vicinity Map

Operator: RED MOUNTAIN ENERGY, LLC
Lease Name and No.: SATTERFIELD 4H-28
Surface Hole Location: 1929' FNL - 1074' FWL
Top Perf: 2690' FSL - 2733' FWL
Sec. 28 Twp. 8N Rng. 18E I.M.
Bottom Hole Location: 165' FSL - 2640' FWL
Sec. 33 Twp. 8N Rng. 18E I.M.
County: Pittsburg State of Oklahoma



Scale 1" = 2000'
Contour Interval: 20'

Ground Elevation at Surface Hole Location: 1020'



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Expires June 30, 2020

Date Staked: 10/05/18

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.

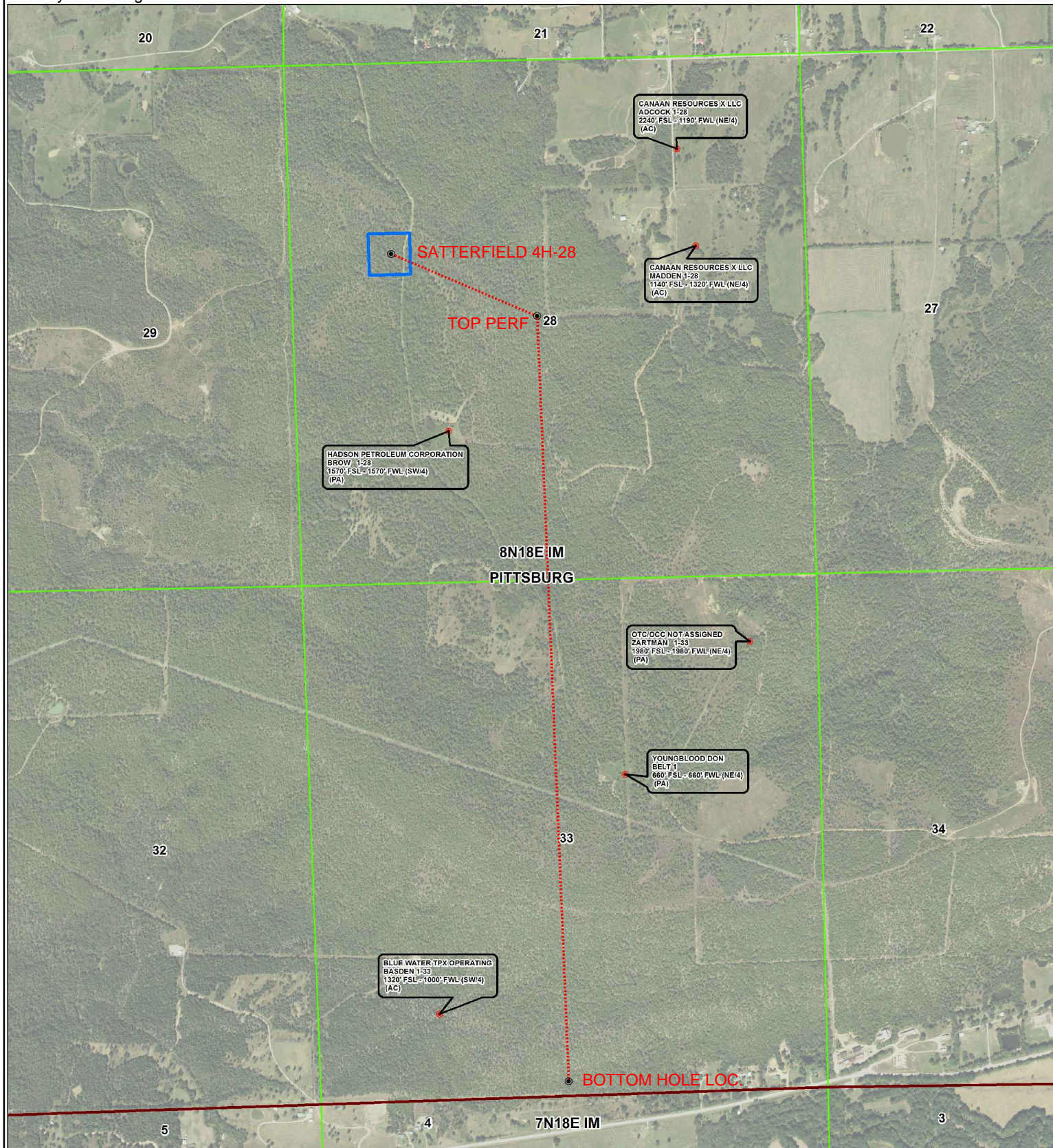
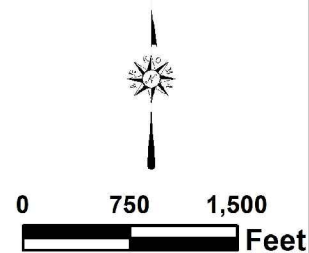
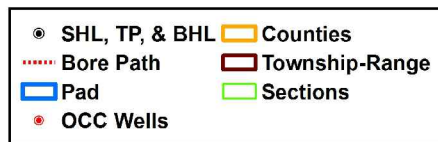
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Anti-Collision

Sec. 28-8N-18E I.M.

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County: Pittsburg State of Oklahoma



County Highway Vicinity Map



Job #: 7930-A-B

Operator: RED MOUNTAIN ENERGY, LLC

Lease Name and No.: SATTERFIELD 4H-28

Accessibility: From the South.

Directions: From the junction of State HWY 31 & State HWY 71 in the town of Quinton, OK, go 2.1 miles North on State HWY 71, then go 1.3 miles West on "EW 129 RD." to the Northwest Quarter of Section 28-8N-18E on the South side of the road.

1 inch = 0.5 mile

provided by,
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