Amend reason: AMENDING TYPE OF DRILLING OPERATION TO A HZ HOLE, CHANGING WELL NUMBER, AND ADDING BHL INFORMATION.

AMEND PERMIT TO DRILL

Well will be 248 feet from nearest unit or lease boundary.
Well No: $1-30 / 31 \mathrm{H}$

Telephone: 9185616737
Operator CANYON CREEK ENERGY OPERATING LLC Name:
CANYON CREEK ENERGY OPERATING LLC
2431 E 61ST ST STE 400
TULSA,

## JOSHUA BILLS \& SARAH BILLS

CENTRAHOMA OK 74534

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

|  | Name | Depth |  |
| :--- | :--- | :--- | :--- |
| 1 | MISSISSIPPIAN | 5500 | 6 |
|  | Name |  |  |
| 3 | HOODFORD | 5800 | 7 |
| 4 |  | 6000 | 8 |
| 5 |  | 9 |  |

Spacing Orders:
No Spacing

201807227
201807228
201807226

## Pending CD Numbers: 201807225

PIT 1 INFORMATION
Type of Pit System: ON SITE
Type of Mud System: AIR

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: 4
Liner not required for Category: 4
Pit Location is ALLUVIAL
Pit Location Formation: ALLUVIUM
Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

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
F. Haul to Commercial soil farming facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No: 551649
H. SEE MEMO

Increased Density Orders:

Special Orders:

## PIT 2 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 ALLUVIAL
Pit Location Formation: ALLUVIUM
PIT 3 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?
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 ALLUVIAL
Pit Location Formation: ..... ALLUVIUM
HORIZONTAL HOLE 1
Sec 31 Twp 2N Rge 9E County COAL
Spot Location of End Point: S2 S2 SE ..... SE
Feet From: SOUTH 1/4 Section Line: 1
Feet From: EAST 1/4 Section Line: ..... 660
Depth of Deviation: ..... 4766
Radius of Turn: ..... 477
Direction: ..... 185
Total Length: ..... 7916
Measured Total Depth: ..... 13431
True Vertical Depth: ..... 6000
End Point Location from Lease,
Unit, or Property Line: 0
Notes:
Category Description
DEEP SURFACE CASING 9/5/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OFCIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR ORSURFACE CASING

| Category | Description |
| :---: | :---: |
| HYDRAULIC FRACTURING | 9/17/2018-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 |
| MEMO | 9/5/2018 - G71 - PITS 2 \& 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT |
| PENDING CD-201807225 | $\begin{aligned} & \text { 9/25/2018 - G58 - (E.O.)(640)(HOR) 30-2N-9E } \\ & \text { EST MSSP, WDFD, HNTN } \\ & \text { COMPL. INT. (MSSP, HNTN) NLT 660' FB } \\ & \text { COMPL. INT. (WDFD) NLT 165' FNL \& FSL, NLT 330' FEL \& FWL } \\ & \text { (COEXIST SP. ORDER 170294 HNTN) } \\ & \text { REC 9/17/2018 (JOHNSON) } \end{aligned}$ |
| PENDING CD-201807226 | ```9/25/2018 - G58 - (E.O.)(640)(HOR) 31-2N-9E EXT }656659\mathrm{ WDFD, HNTN EST MSSP COMPL. INT. (MSSP, HNTN) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL (COEXIST SP. ORDER 116843 HNTN) REC 9/17/2018 (JOHNSON)``` |
| PENDING CD - 201807227 | ```9/25/2018-G58 - (E.O.) 30 \& 31-2N-9E EST MULTIUNIT HORIZONTAL WELL X201807225 MSSP, WDFD, HNTN X201807226 MSSP, WDFD, HNTN (MSSP, HNTN ARE ADJACENT COMMON SOURCES OF SUPPLY TO WDFD) 50\% 30-2N-9E 50\% 31-2N-9E NO OP. NAMED REC 9/17/2018 (JOHNSON)``` |
| PENDING CD-201807228 | ```9/25/2018-G58-(E.O.) 30 \& 31-2N-9E X201807225 MSSP, WDFD, HNTN X201807226 MSSP, WDFD, HNTN COMPL. INT. 30-2N-9E NCT 0' FSL, NCT 2500' FNL, NCT 330' FEL COMPL. INT. 31-2N-9E NCT 0' FNL, NCT 165' FSL, NCT 330' FEL NO OP. NAMED REC 9/17/2018 (JOHNSON)``` |

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.

CANYON

Operator: CANYON CREEK ENERGY
Lease Name and No.: BILLS 1-30/31H
Footage: 2264' FNL-248' FEL Gr. Elevation: 664' Section: 30 Township: 2N Range: 9E I.M.
County: Coal State of Oklahoma
Terrain at Loc.: Driveway to be moved, runs through location. Location crosses power line to be moved.


GPS DATUM NAD 83 NAD 27 OK SOUTH ZONE

Surface Hole Loc Lat: $34^{\circ} 36^{\prime} 55.74^{\prime \prime} \mathrm{N}$ Lon: $96^{\circ} 23^{\prime} 25.42^{\prime \prime} \mathrm{W}$ Lat: 34.61548250 Lon: -96.39039374 X: 2452772 Y: 470462
Surface Hole Loc.:
Lat: $34^{\circ} 36^{\prime} 55.41^{\prime \prime} \mathrm{N}$
Lon: $96^{\circ} 23^{\prime 24.41 " W ~}$ Lat: 34.61539096
Lon: -96.39011365
X: 2484368
Y: 470417
Landing Point:
Lat: $34^{\circ} 36^{\prime} 51.95^{\prime \prime} \mathrm{N}$ Lon: $96^{\circ} 23^{\prime} 30.32^{\prime \prime} \mathrm{W}$ Lat: 34.61443063 Lon: -96.39175694 X: 2452368 Y: 470073
Landing Point: Lat: $34^{\circ} 36^{\prime} 51.62^{\prime \prime} \mathrm{N}$ Lon: $96^{\circ} 23^{\prime} 29.32^{\prime \prime} \mathrm{W}$ Lat: 34.61433909 Lon: -96.39147686 X: 2483964 Y: 470028
Bottom Hole Loc Lat: $34^{\circ} 35^{\prime} 33.63^{\prime \prime} \mathrm{N}$ Lon: $96^{\circ} 23^{\prime} 30.03^{\prime \prime} \mathrm{W}$ Lat: 34.59267607 Lon: -96.39167370 X: 2452519 Y: 462157
Bottom Hole Loc. Lat: $34^{\circ} 35^{\prime} 33.30^{\prime \prime} \mathrm{N}$ Lon: $96^{\circ} 23^{\prime 29.02 " W}$ Lat: 34.59258444 Lon: -96.39139400 X: 2484115 Y: 462112

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## 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 \#7032-B
Date Staked: 03/30/17 By: H.S.
Date Drawn: 04/03/17 By: P.B.
Revise LP \& BHL: 09/04/18 Bv: M.K.

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.



Operator: CANYON CREEK ENERGY
Lease Name and No.: BILLS 1-30/31H
Footage: $2264^{\prime}$ FNL-248' FEL Gr. Elevation: 664'
Section: 30 Township: 2 N Range: 9 E I.M.
County: Coal State of Oklahoma
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$1^{\prime \prime}=1500^{\prime}$

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Lon: $96^{\circ} 23^{\prime 29.02 " W}$
Lat: 34.59258444
Lon: -96.39139400
X: 2484115
Y: 462112

of a Licensed Professional Land Surveyor, but the accuracy of this survey is
not guaranteed. Please contact Arkoma Surveyng and Mapp ing promply if
any inconsistency is determined GPS data is observed from RTK- GPS
-NOTE: X and $Y$ data shown hereon for Secton Corners may NOT have be

- NoTE X and Y data shown hereon for Sectoo coriers may NKT have been
-Quarter Section distances may be assumed from a Government Survey Plat or
assumed at a proportonate dstance from opposing section corners, or occupation
thereeff, 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
nvoice \#7032-B
Date Staked: 03/30/17 By: H.S
Date Drawn: 04/03/17 By:P.B
Revise LP \& BHL: 09/04/18 Bv: M.K.

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.


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Operator: CANYON CREEK ENERGY
Lease Name and No.: BILLS 1-30/31H
Surface Hole Location: 2264' FNL - 248' FEL
Landing Point: 2650' FNL - 660' FWL
Sec. 30 Twp. 2N Rng. 9E I.M.
Bottom Hole Location: O' FSL - 660' FWL
Sec. 31 Twp. 2 N Rng. 9E I.M.
County: Coal State of Oklahoma
Ground Elevation at Surface Hole Location: 664'

Scale $1^{\prime \prime}=2000$
Contour Interval: $1^{\prime}$


Issued 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: 03/30/17

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
( ${ }^{\text {Canton }}$ Anti-Collision

Operator: CANYON CREEK ENERGY
Lease Name and No.: BILLS 1-30/31H
Surface Hole Location: 2264' FNL - 248' FEL Landing Point: $2650^{\prime}$ FNL - 660' FWL
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    reperesent a true boundary survey

