

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

API NUMBER: 063 24804

Approval Date: 05/29/2018

Expiration Date: 11/29/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 26 Twp: 6N Rge: 9E

County: HUGHES

SPOT LOCATION: ☐ NE ☐ NE ☐ NW ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 260 1570

Lease Name: JEREMY

Well No: 23-1H

Well will be 260 feet from nearest unit or lease boundary.

Operator Name: CORTERRA ENERGY OPERATING LLC

Telephone: 9186150400

OTC/OCC Number: 23995 0

CORTERRA ENERGY OPERATING LLC
1717 S BOULDER AVE STE 900
TULSA, OK 74119-4844

GARY & RUTH DESHIELDS
4185 N. 376 RD.
ATWOOD OK 74827

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	5461	6	
2	WOODFORD	5943	7	
3	SYLVAN	6103	8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201703287
201803169
201803170

Special Orders:

Total Depth: 11325

Ground Elevation: 811

Surface Casing: 710

Depth to base of Treatable Water-Bearing FM: 510

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: AIR

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

PERMIT NO: 18-34409

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

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 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: 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

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? 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 23 Twp 6N Rge 9E County HUGHES

Spot Location of End Point: NW NW NW NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 2500

Depth of Deviation: 5261

Radius of Turn: 573

Direction: 350

Total Length: 5164

Measured Total Depth: 11325

True Vertical Depth: 6193

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

Notes:

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.

063 24804 JEREMY 23-1H

Category	Description
HYDRAULIC FRACTURING	<p>5/9/2018 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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,</p> <p>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</p>
MEMO	<p>5/9/2018 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 3 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT</p>
PENDING CD - 201703287	<p>5/9/2018 - G57 - (640)(HOR) 23-6N-9E EST MSSP, WDFD, SLVN POE TO BHL (MSSP) NCT 660' FB POE TO BHL (SLVN) NCT 330' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL REC 5-1-2018 (DUNN)</p>
PENDING CD - 201803169	<p>5/9/2018 - G57 - (I.O.) 23-6N-9E X201703287 MSSP, WDFD, SLVN SHL (26-6N-9E) 315' FNL, 1220' FEL ** COMPL. INT. (23-6N-9E) NCT 150' FSL, NCT 150' FNL, NCT 660' FEL NO OP. NAMED REC 5-8-2018 (JOHNSON)</p> <p>**S/B SHL (26-6N-9E) 260' FNL, 1570' FEL WILL BE CORRECTED AT THE HEARING FOR THE FINAL ORDER PER OPERATOR</p>

Corterra Energy, LLC
1717 S. Boulder Ave, Suite 900
Tulsa, OK 74119

Permit ex 11/29/18
Surety ex 2/23/19
Operator # 23995


September 26, 2018

Ms. Virginia Hullinger
Oklahoma Corporation Commission
Oil & Gas Conservation Division
Jim Thorpe Building
P. O. Box 52000
Oklahoma City, OK 73152-2000


RE: Jeremy 23-1H
NE/4, NE/4, NW/4, NE/4
Section 26, T6N-R9E
Hughes County, Oklahoma
API #35-063-24804

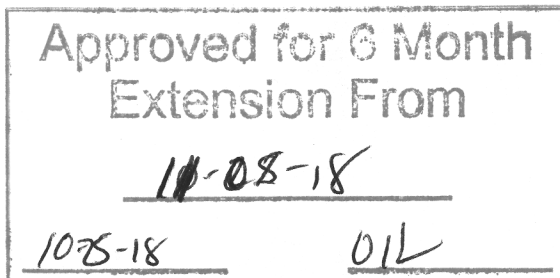
Ms. Hullinger:

This letter is to request a permit extension of six (6) months from November 29, 2018 in which to drill the above referenced well.

If you have any questions or wish to discuss this request, please call or email me at (918) 615-0413 or rbarker@corterraenergy.com. Thank you for your consideration of our request.

Sincerely,


Rachel Barker
Senior Geologist



RECEIVED

SEP 28 2018

OKLAHOMA CORPORATION
COMMISSION

WELL LOCATION

M & M Land Surveying, Inc.
Phone (580) 226-0446
520 E Street N.W.
Ardmore, OK 73401

This location has been staked according to the best official survey records available to us. The metrical data shown hereon is for permitting the well location and the section location may or may not be field verified. Please review this plat and notify us immediately of any discrepancy.

Company Name: CORTERRA ENERGY OPERATING, LLC.

Lease Name: JEREMY 2623 1HX

Section 26 Township 6 N Range 9 E , I.B.M., County of Hughes, State of Oklahoma

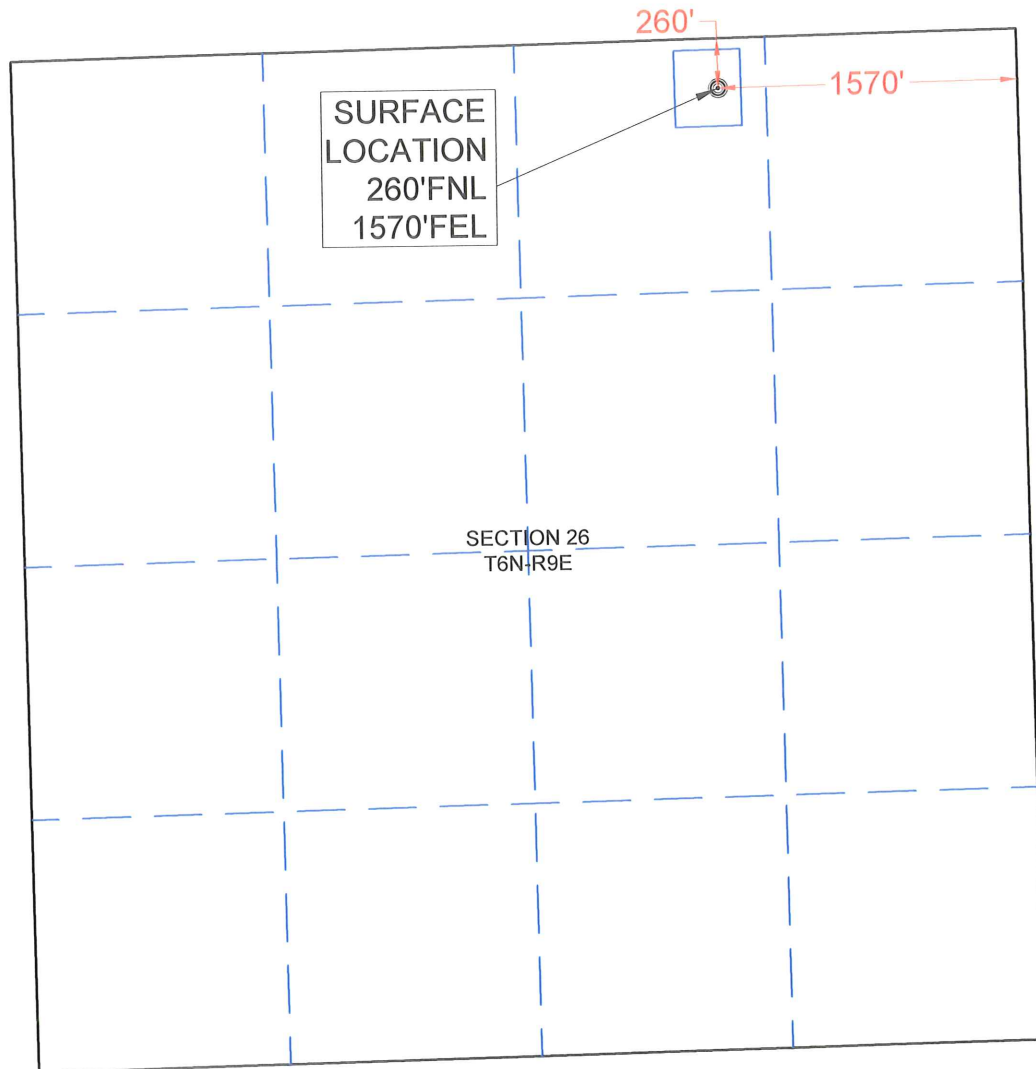
Original Location: 260'FNL - 1570'FEL Elevation 811' GROUND Good Location? YES

Topography: CORN FIELD - 20' EAST OF JAY 26 1HX

Best Accessibility to Location: From the North

Distance & Direction From Nearest Town: 1.2 miles Northeast of Atwood

From the town of Atwood and the intersection of State Highway No. 1 and State Highway No. 48; Go North 1.0 mile on State Highway No. 48; Then go East 0.7 mile on County Road E1410 to location in SECTION 26, T6N, R9E, I.B.M., Hughes County, Oklahoma.



PAD CORNER ELEVATIONS

NE/C = 811.19'

SE/C = 807.53'

SW/C = 811.21'

NW/C = 811.98'

NAD 27 OK SOUTH SURFACE LOCATION

LAT: 34.969915°N

LONG: 96.322844°W

N= 599752.13'

E= 2502461.83'

NAD 83 OK SOUTH SURFACE LOCATION

LAT: 34.970002°N

LONG: 96.323129°W

N= 599799.6'

E= 2470864.22'

SCALE 1" = 1000'
0' 1000'



SURVEY BY:	M & M Land Surveying, Inc. ~ C.A. No. 3093 (LS)
DRAWING BY:	Bennett-Morris And Associates Land Surveying, P.C.
© COPYRIGHT 2017	C.A. No. 5975 (LS) ~ Aaron L. Morris, RPLS
PROJECT NUMBER:	SITE VISIT: (Explanation and Date)
17225	STAKING DATE: 06/01/2017
SHEET: 1 OF 4	DRAWING DATE: 04/20/2018



CERTIFICATE:

I D. Harry McClintick a Registered Land Surveyor in the State Of Oklahoma, do hereby certify that the above described Well Location was surveyed and staked on the ground as shown and that said plat meets or exceeds the Oklahoma Minimum Technical Standards for the practice of land surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.

D. Harry McClintick
D. Harry McClintick
PLS. No. 1367 CFEDS

LOCATION AND ELEVATION VERIFICATION MAP

M & M Land Surveying, Inc.
Phone (580) 226-0446
520 E Street N.W.
Ardmore, OK 73401

Company Name: CORTERRA ENERGY OPERATING, LLC.

Lease Name: JEREMY 2623 1HX

Section 26 Township 6 N Range 9 E , I.B.M., County of Hughes, State of Oklahoma

Elevation Good Location?

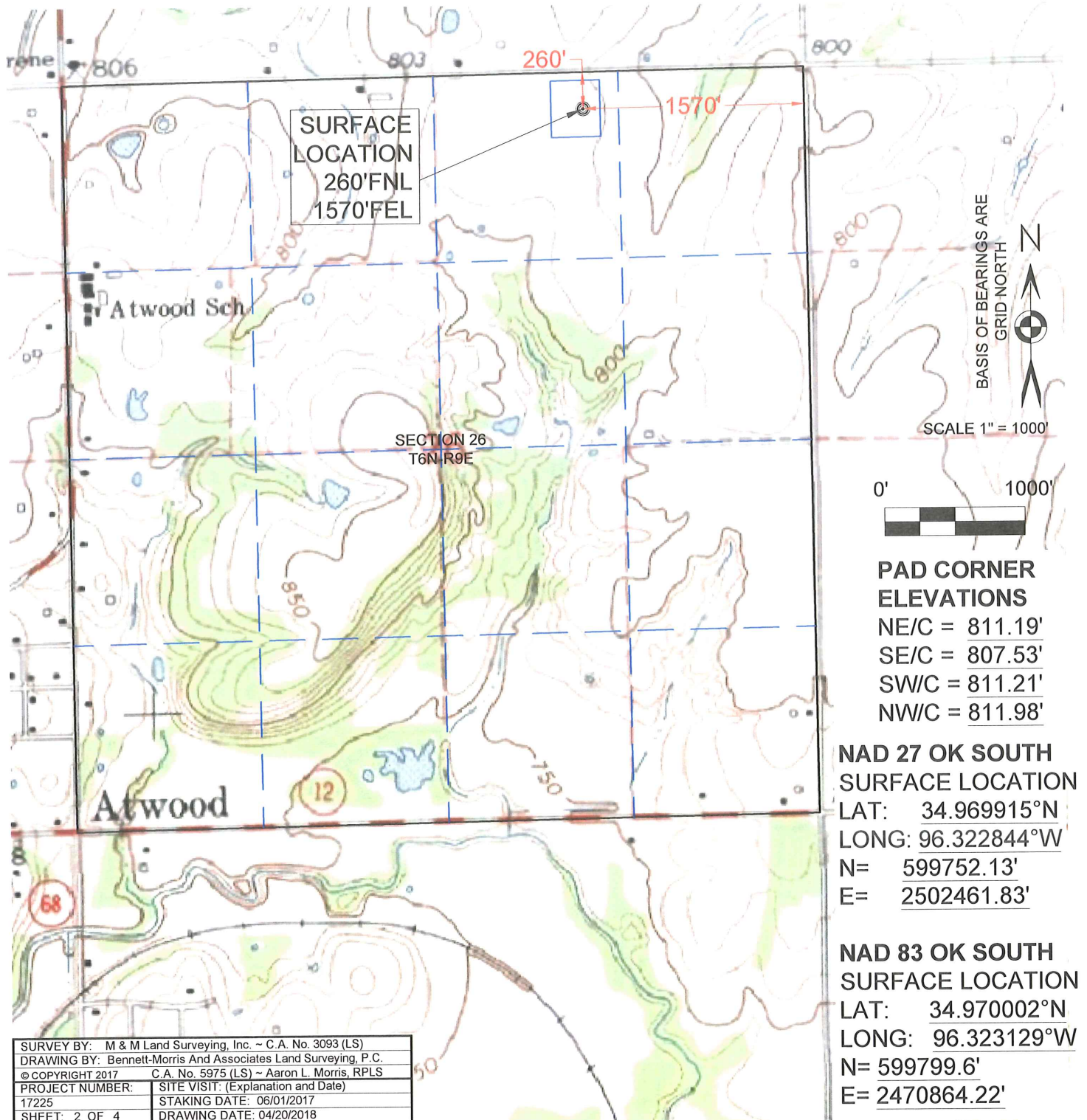
Original Location: 260'FNL - 1570'FEL 811' GROUND YES

Topography: CORN FIELD - 20' EAST OF JAY 26 1HX

Best Accessibility to Location: From the North

Distance & Direction From Nearest Town: 1.2 miles Northeast of Atwood

From the town of Atwood and the intersection of State Highway No. 1 and State Highway No. 48; Go North 1.0 mile on State Highway No. 48; Then go East 0.7 mile on County Road E1410 to location in SECTION 26, T6N, R9E, I.B.M., Hughes County, Oklahoma.



AERIAL PHOTO

M & M Land Surveying, Inc.
Phone (580) 226-0446
520 E Street N.W.
Ardmore, OK 73401

Company Name: **CORTERRA ENERGY OPERATING, LLC.**

Lease Name: **JEREMY 2623 1HX**

Section 26 Township 6 N Range 9 E , I.B.M., County of Hughes, State of Oklahoma
Elevation Good Location?

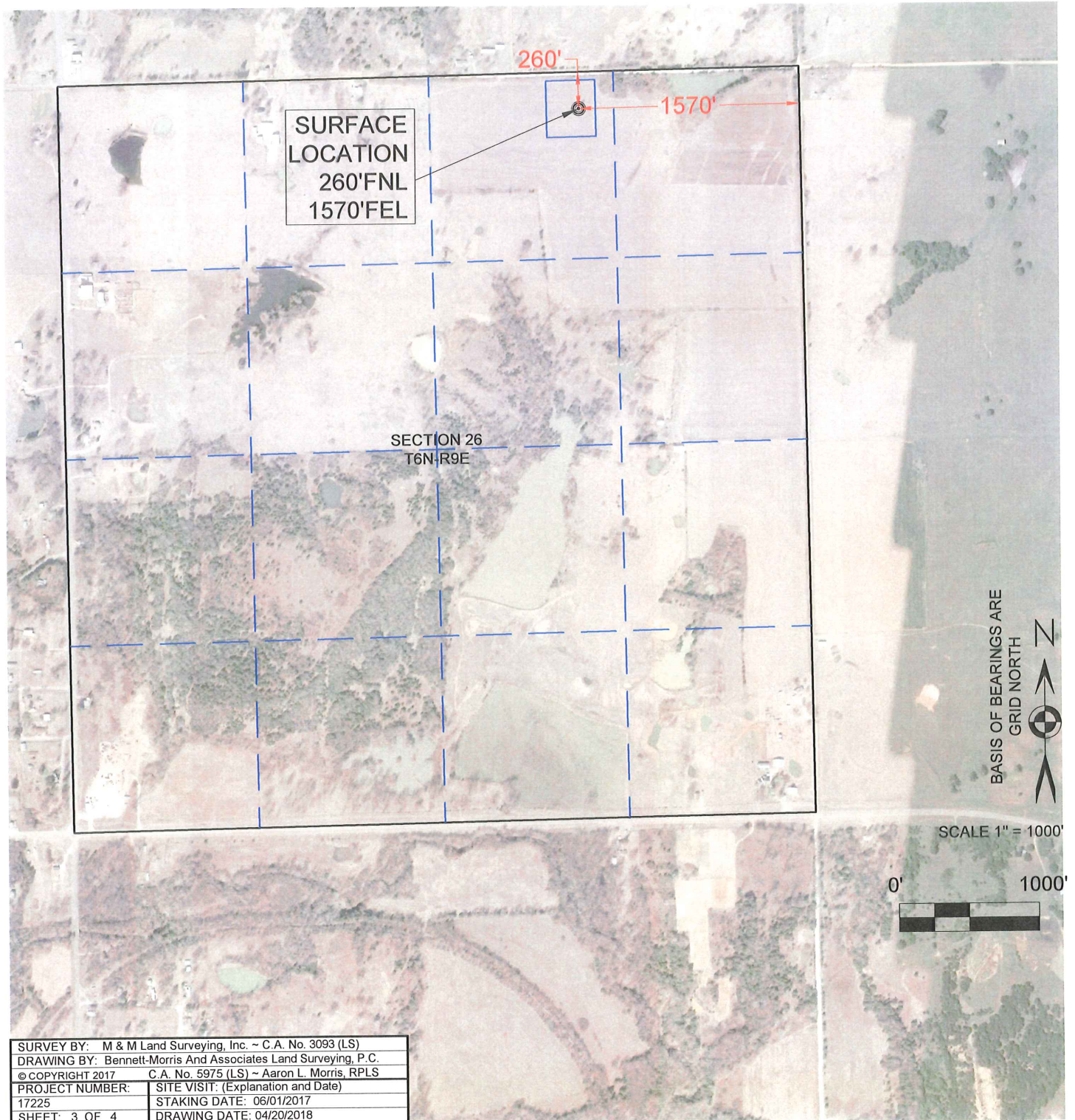
Original Location: 260'FNL - 1570'FEL 811' GROUND YES

Topography: CORN FIELD - 20' EAST OF JAY 26 1HX

Best Accessibility to Location: From the North

Distance & Direction From Nearest Town: 1.2 miles Northeast of Atwood

From the town of Atwood and the intersection of State Highway No. 1 and State Highway No. 48; Go North 1.0 mile on State Highway No. 48; Then go East 0.7 mile on County Road E1410 to location in SECTION 26, T6N, R9E, I.B.M., Hughes County, Oklahoma.



PERMIT PLAT

M & M Land Surveying, Inc.
Phone (580) 226-0446
520 E Street N.W.
Ardmore, OK 73401

Company Name: **CORTERRA ENERGY OPERATING, LLC.**

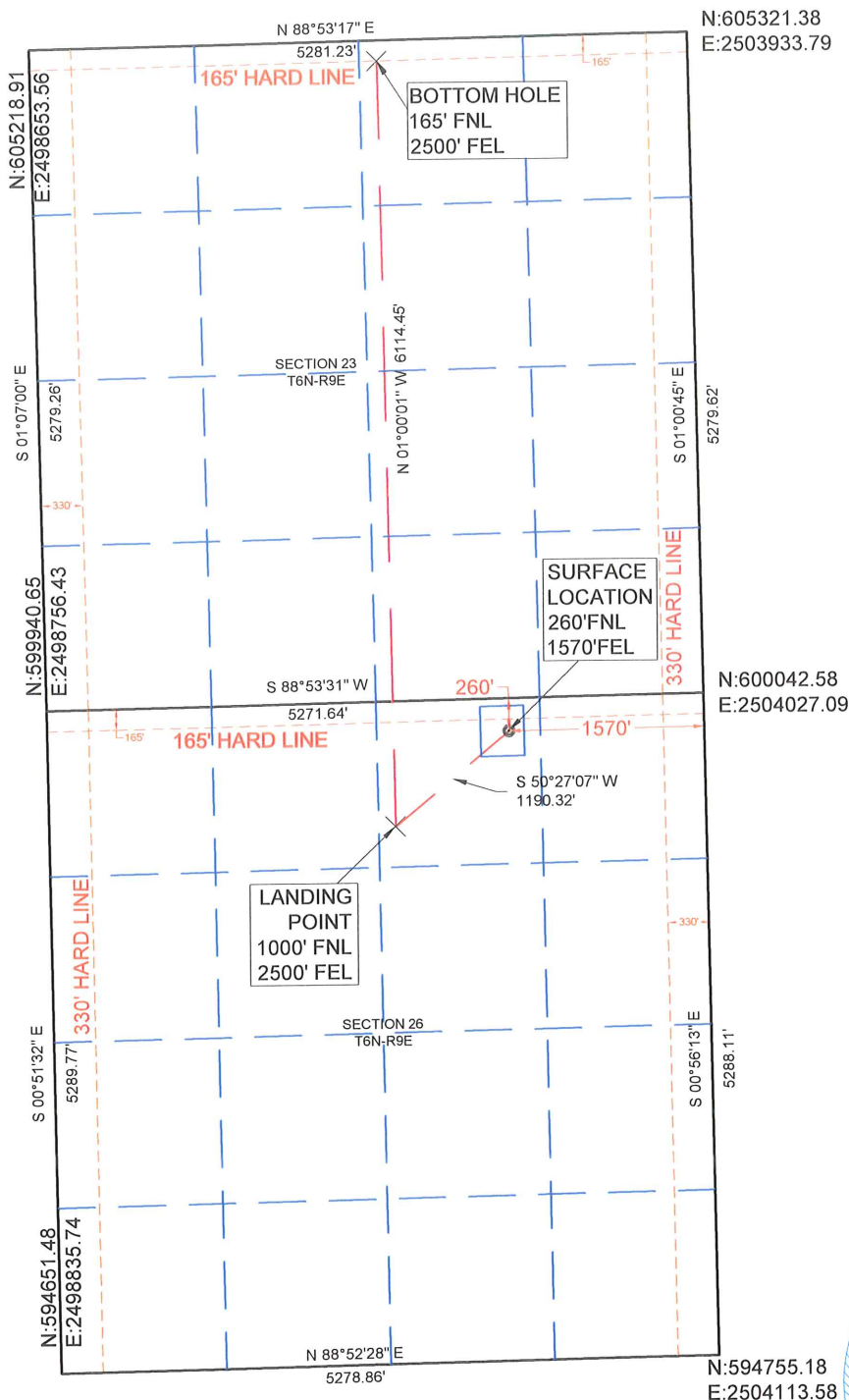
Lease Name: **JEREMY 2623 1HX**

Section 26 Township 6 N Range 9 E , I.B.M, County of Hughes, State of Oklahoma

Elevation Good Location?

Original Location: 260'FNL - 1570'FEL 811' GROUND YES

Distance & Direction From Nearest Town: 1.2 miles Northeast of Atwood



NAD 27 OK SOUTH SURFACE LOCATION

LAT: 34.969915°N
LONG: 96.322844°W

N= 599752.13'
E= 2502461.83'

LANDING POINT

N= 598994.33'
E= 2501543.92'

BOTTOM HOLE

N= 605107.8'
E= 2501437.25'

NAD 83 OK SOUTH SURFACE LOCATION

LAT: 34.970002°N
LONG: 96.323129°W

N= 599799.6'
E= 2470864.22'

LANDING POINT

N= 599041.77'
E= 2469946.32'

BOTTOM HOLE

N= 605155.29'
E= 2469839.58'



SCALE 1" = 1500'

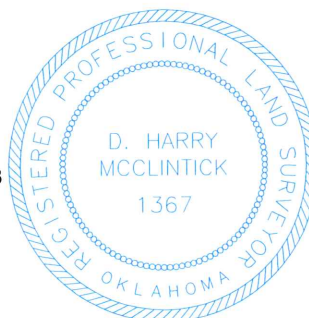


DATA DERIVED FROM
G.P.S. WITH O.P.U.S.
DATA.

This location has been staked according to the best official survey records available to us. The metrical data shown hereon is for permitting the well location and the section location may or may not be field verified. Please review this plat and notify us immediately of any discrepancy.

CERTIFICATE:

I D. Harry McClintick a Registered Land Surveyor in the State Of Oklahoma, do hereby certify that the above described Well Location was surveyed and staked on the ground as shown and that said plat meets or exceeds the Oklahoma Minimum Technical Standards for the practice of land surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.



D. Harry McClintick
PLS. No.1367 CFEDS

SURVEY BY:	M & M Land Surveying, Inc. ~ C.A. No. 3093 (LS)
DRAWING BY:	Bennett-Morris And Associates Land Surveying, P.C.
© COPYRIGHT 2017	C.A. No. 5975 (LS) ~ Aaron L. Morris, RPLS
PROJECT NUMBER:	SITE VISIT: (Explanation and Date)
17225	STAKING DATE: 06/01/2017
SHEET: 4 OF 4	DRAWING DATE: 04/20/2018