

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

API NUMBER: 015 23298

Approval Date: 04/11/2018

Expiration Date: 10/11/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 13 Twp: 12N Rge: 13W

County: CADDO

SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 245 365

Lease Name: JETT RYAN

Well No: 1-13-24XHM

Well will be 245 feet from nearest unit or lease boundary.

Operator Name: CONTINENTAL RESOURCES INC

Telephone: 4052349020; 4052349

OTC/OCC Number: 3186 0

CONTINENTAL RESOURCES INC  
PO BOX 269000  
OKLAHOMA CITY, OK 73126-9000

ALLEN AND JACKIE ENTZ  
2104 OLD 66 RD.  
HYDRO OK 73048

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	15270	6	
2	WOODFORD	15970	7	
3			8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802173  
201802174  
201802175  
201802176

Special Orders:

Total Depth: 25350

Ground Elevation: 1564

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 200

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

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

PERMIT NO: 18-33953

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 24 Twp 12N Rge 13W County CADDO

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 30

Feet From: EAST 1/4 Section Line: 380

Depth of Deviation: 14802

Radius of Turn: 477

Direction: 181

Total Length: 9799

Measured Total Depth: 25350

True Vertical Depth: 15970

End Point Location from Lease,  
Unit, or Property Line: 30

Notes:

Category

Description

DEEP SURFACE CASING

3/29/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

3/29/2018 - 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](http://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](http://FRACFOCUS.ORG)

MEMO

3/29/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201802173

4/6/2018 - G58 - (640) 13-12N-13W  
EXT 583380 MSSP, WDFD, OTHER  
REC 4/9/2018 (MURER)

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.

015 23298 JETT RYAN 1-13-24XHM

Category	Description
PENDING CD - 201802174	4/6/2018 - G58 - (640) 24-12N-13W EXT OTHER EXT 585115 WDFD EST MSSP REC 4/9/2018 (MURER)
PENDING CD - 201802175	4/6/2018 - G58 - (I.O.) 13 & 24-12N-13W EST MULTIUNIT HORIZONTAL WELL X20182175** MSSP, WDFD (13-12N-13W) X20182175** MSSP, WDFD (24-12N-13W) (WDFD IS ADJACENT COMMON SOURCE OF SUPPLY TO MSSP) 50% 13-12N-13W 50% 24-12N-13W NO OP. NAMED REC 4/9/2018 (MURER)  **S/B SP ORDERS 201802173, 201802174 TO BE CORRECTED AT HEARING PER ATTORNEY FOR OP.
PENDING CD - 201802176	4/6/2018 - G58 - (I.O.) 13 & 24-12N-13W X20182175** MSSP, WDFD (13-12N-13W) X20182175** MSSP, WDFD (24-12N-13W) COMPL. INT. (13-12N-13W) NCT 150' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (24-12N-13W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL NO OP. NAMED REC 4/9/2018 (MURER)  **S/B SP ORDERS 201802173, 201802174 TO BE CORRECTED AT HEARING PER ATTORNEY FOR OP.

# COVER SHEET



CONTINENTAL RESOURCES, INC.  
JETT RYAN #1-13-24XHM  
Sec. 13 Twp. 12N Rng. 13W  
County : Caddo State of Oklahoma

SHEET	REVISE DATE	BY	COMMENTS
EXHIBIT "A"	11/06/17	JH	REV. HS/BHL
ALL	11/15/17	RM	REV. LEASE NAME
EXHIBIT B	11/21/17	RM	REV. DRIVING DIRECTIONS

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

Invoice #7439

Date Staked: 10/25/17

GPS DATUM  
NAD 27  
NAD 83  
OK SOUTH ZONE



# Well Location Plat

Operator : CONTINENTAL RESOURCES, INC.

015-23298

EXHIBIT "A"  
S.H.L. Sec. 13-12N-13W I.M.  
B.H.L. Sec. 24-12N-13W I.M.  
CADDY COUNTY  
(SHEET 1 OF 2)

## NAD 83

Point	Northing	Easting	Elevation	Latitude/Longitude	Latitude/Longitude	Description	Design Elevation
20	797068	1809112	0.0			RR SPIKE NWc 13-12N-13W	
21	791810	1809088	0.0			1/2" IR NWc 24-12N-13W	
22	786542	1809090	0.0			1/2" IR SWc 24-12N-13W	
23	797040	1814403	0.0			IR W/CAP NEc 13-12N-13W	
24	791766	1814375	0.0			1/2" IR SEc 13-12N-13W	
25	786484	1814356	0.0			1/2" IR SEc 24-12N-13W	
50	793119	1810414	0.0	LAT:35°30'41.15"N LON:98°31'52.04"W	LAT:35.51142919 LON:-98.53112254	AC-TULSA ENERGY HEIDEBRECHT1-13 OCC STATUS: AC, TVD: 13800'	
51	789934	1810953	0.0	LAT:35°30'09.68"N LON:98°31'45.32"W	LAT:35.50268843 LON:-98.52925682	AC-LINN OPERATING JESSIE 1-24 OCC STATUS: PA, TVD: 13950'	
52	787818	1813041	0.0	LAT:35°29'48.87"N LON:98°31'19.95"W	LAT:35.49690710 LON:-98.52220733	AC-ANDARKO EPPERLY, J.F. 1-24 OCC STATUS: PA, TVD: 14055'	
100	796797	1814037	1565.6'	LAT:35°31'17.70"N LON:98°31'08.45"W	LAT:35.52158471 LON:-98.51901478	A. JETT RYAN #1-13-24XHM 245' FNL - 365' FEL	1563.9'
200	796317	1814020	0.0	LAT:35°31'12.96"N LON:98°31'08.64"W	LAT:35.52026616 LON:-98.51906550	A. HEEL SLOT 725' FNL - 380' FEL	
300	786518	1813976	0.0	LAT:35°29'36.05"N LON:98°31'08.56"W	LAT:35.49334803 LON:-98.51904360	A. BOTTOM HOLE LOCATION 30' FSL - 380' FEL	

## NAD 27

Point	Northing	Easting	Elevation	Latitude/Longitude	Latitude/Longitude	Description	Design Elevation
20	797026	1840711	0.0			RR SPIKE NWc 13-12N-13W	
21	791768	1840687	0.0			1/2" IR NWc 24-12N-13W	
22	786500	1840689	0.0			1/2" IR SWc 24-12N-13W	
23	796998	1846002	0.0			IR W/CAP NEc 13-12N-13W	
24	791724	1845974	0.0			1/2" IR SEc 13-12N-13W	
25	786442	1845954	0.0			1/2" IR SEc 24-12N-13W	
50	793077	1842013	0.0	LAT:35°30'40.96"N LON:98°31'50.80"W	LAT:35.51137723 LON:-98.53077727	AC-TULSA ENERGY HEIDEBRECHT1-13 OCC STATUS: AC, TVD: 13800'	
51	789892	1842552	0.0	LAT:35°30'09.49"N LON:98°31'44.08"W	LAT:35.50263628 LON:-98.52891191	AC-LINN OPERATING JESSIE 1-24 OCC STATUS: PA, TVD: 13950'	
52	787777	1844639	0.0	LAT:35°29'48.68"N LON:98°31'18.71"W	LAT:35.49685486 LON:-98.52186282	AC-ANDARKO EPPERLY, J.F. 1-24 OCC STATUS: PA, TVD: 14055'	
100	796755	1845636	1565.6'	LAT:35°31'17.52"N LON:98°31'07.21"W	LAT:35.52153300 LON:-98.51866962	A. JETT RYAN #1-13-24XHM 245' FNL - 365' FEL	1563.9'
200	796275	1845619	0.0	LAT:35°31'12.77"N LON:98°31'07.39"W	LAT:35.52021442 LON:-98.51872039	A. HEEL SLOT 725' FNL - 380' FEL	
300	786476	1845575	0.0	LAT:35°29'35.86"N LON:98°31'07.32"W	LAT:35.49329573 LON:-98.51869929	A. BOTTOM HOLE LOCATION 30' FSL - 380' FEL	

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, 2018

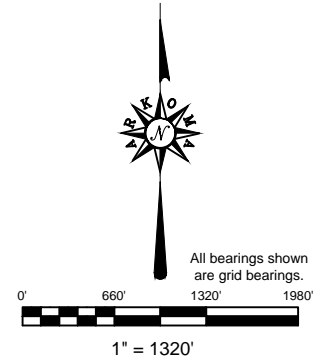
Invoice #7439

Date Staked : 10/25/17 By : J.W.

Date Drawn : 11/02/17 By : J.H.



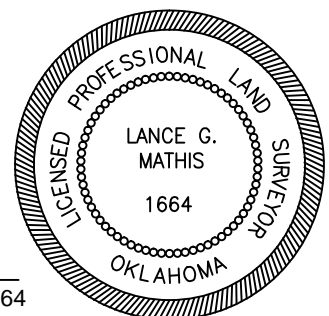
EXHIBIT "A"  
S.H.L. Sec. 13-12N-13W I.M.  
B.H.L. Sec. 24-12N-13W I.M.  
CADDO COUNTY  
(SHEET 2 OF 2)



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 Alabama Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.

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. 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.

11/15/17  
OK LPLS 1664





# Vicinity Map

Job #: 7439

CONTINENTAL RESOURCES, INC.

JETT RYAN #1-13-24XHM

Accessibility: From the North.

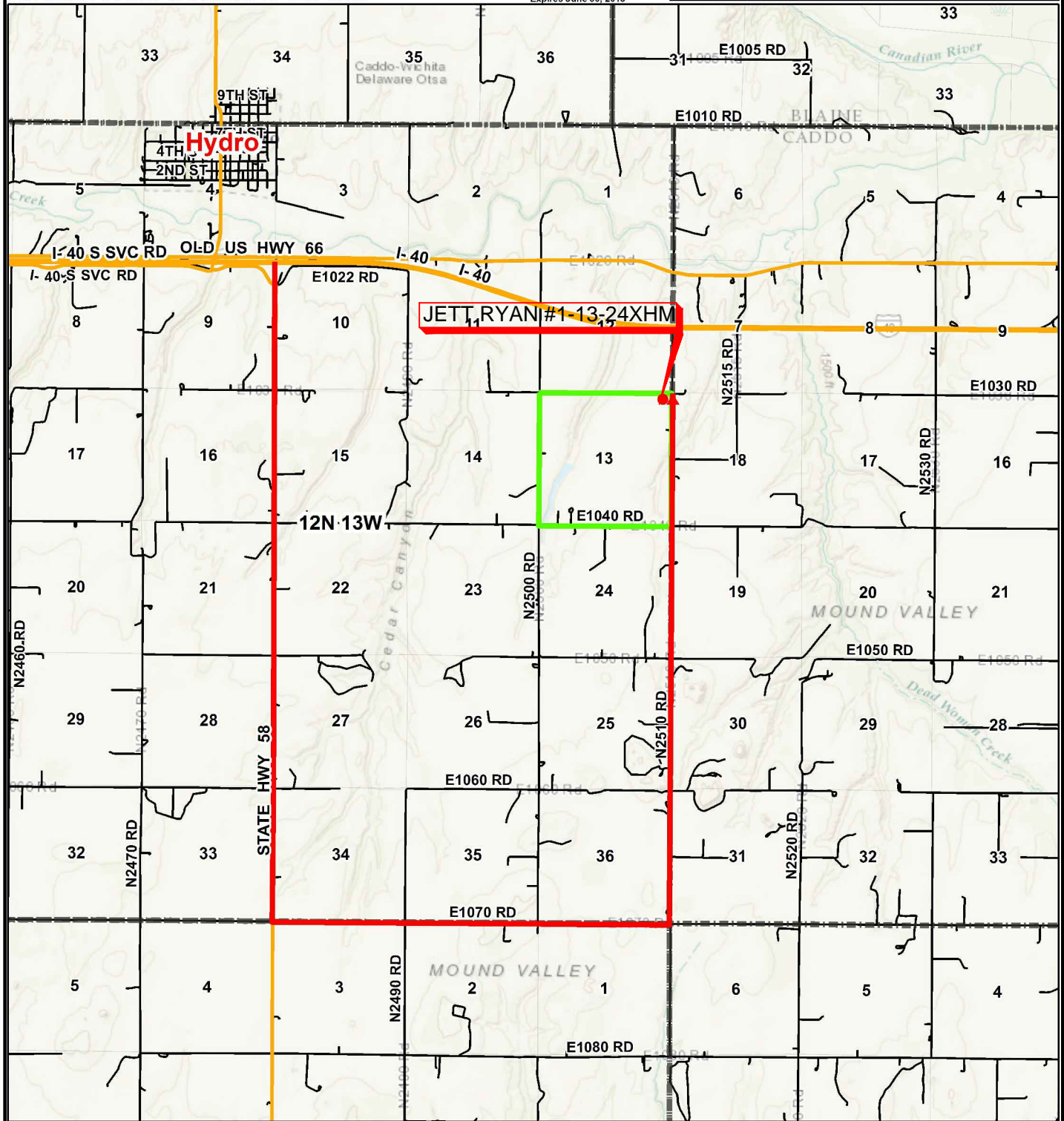
Directions: From the junction of I-40 & State HWY 58 in the town of Hydro, OK, go 5.0 miles South on State HWY 58, 3.0 miles East on "E1070 RD.", then go 4.0 miles North on "N2510 RD." to the Northeast Corner of Section 13-12N-13W.

EXHIBIT "B"



1 in = 1 miles

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



*Terrain*

FACING NORTH

STAKES NOT SET, NO PHOTOS TAKEN.

FACING SOUTH

STAKES NOT SET, NO PHOTOS TAKEN.

Terrain at Loc. : Location fell in open pasture.

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

Date Staked: 10/25/17



CONTINENTAL RESOURCES, INC.

JETT RYAN #1-13-24XHM

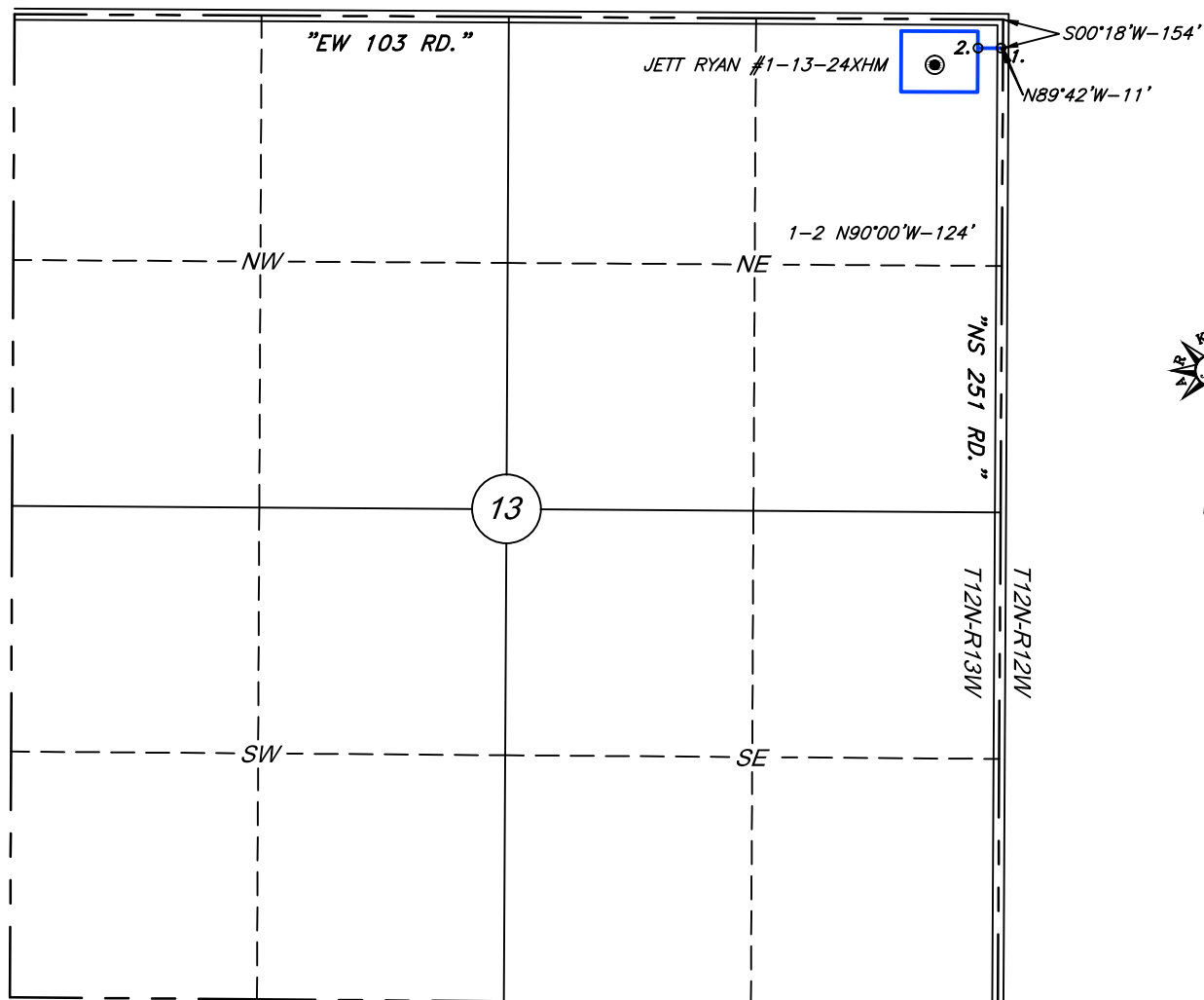
Sec. 13 Twp. 12N Rng. 13W

County : Caddo State of Oklahoma



# EXHIBIT "D"

TOTAL PROPOSED LEASE ROAD=  
124' OR 7.52 RODS



## NOTES

- \* This Proposed Lease Road Plat does not represent a true boundary survey.
- \* The footages and ties shown hereon are from lines of occupation and may not be from actual property corners.
- \* Ownership shown hereon is provided by, and/or verified with client.



SURVEY & MAPPING BY:  
ARKOMA SURVEYING & MAPPING, PLLC

(918)465-5711 P.O. Box 238 C.A. #5348,  
(918)465-5030 fax Wilburton, OK 74578 EXP. DATE 6-30-18

SURV. BY: J.W. 10/25/17

DRAWN BY: J.H. 11/02/17

APPROVED BY: L.G.M

SHEET 1 OF 1

SCALE: 1" = 1000'

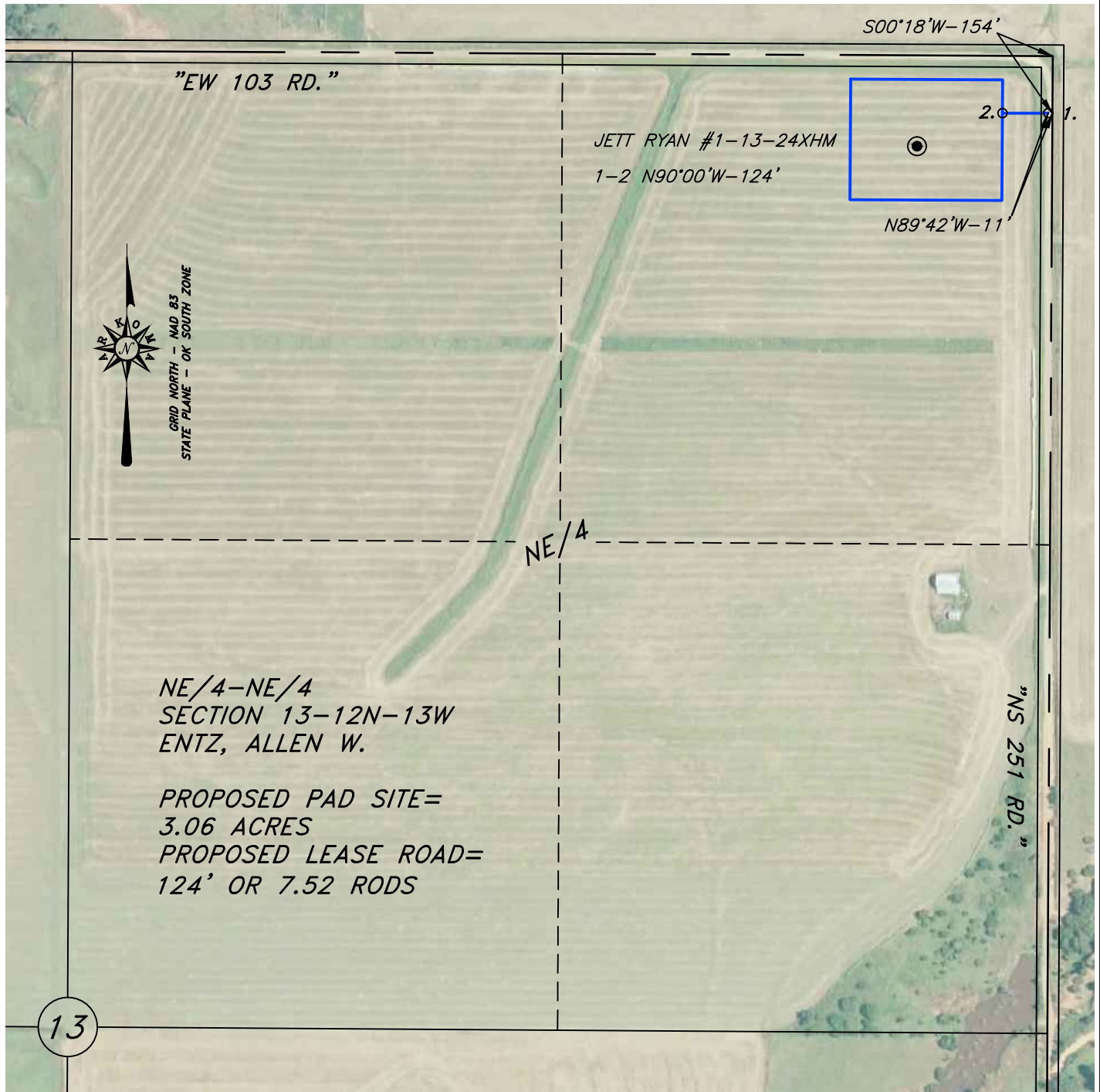
JOB NO.: 7439

DRAW. NO.: 7439-RD

SHEET SIZE: 8.5" X 11"

TOTAL PROPOSED LEASE ROAD=  
124' OR 7.52 RODS

EXHIBIT "E"



-NOTES-

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- \* The footages and ties shown hereon are from lines of occupation and may not be from actual property corners.
- \* Ownership shown hereon is provided by, and/or verified with client.



SURVEY & MAPPING BY:

ARKOMA SURVEYING & MAPPING, PLLC

(918)465-5711 P.O. Box 238 C.A. #5348,  
(918)465-5030 fax Wilburton, OK 74578 EXP. DATE 6-30-18

SURV. BY: J.W. 10/25/17

DRAWN BY: J.H. 11/02/17

APPROVED BY: L.G.M

SHEET 1 OF 1

SCALE: 1" = 400'

JOB NO.: 7439

DRAW. NO.: 7439-RD

SHEET SIZE: 8.5" X 11"

EXHIBIT "F"

# PLAN AND PROFILE OF A PROPOSED LEASE ROAD FOR THE "JETT RYAN #1-13-24XHM" IN A PART OF THE NE/4-NE/4 SECTION 13, T12N-R13W, CADDO COUNTY, OKLAHOMA



NE/4-NE/4  
SECTION 13  
T12N-R13W

NW/4-NW/4  
SECTION 18  
T12N-R12W

END CENTERLINE  
ROAD SURVEY  
STA: 1+24

BEGIN CENTERLINE  
ROAD SURVEY  
STA: 0+00

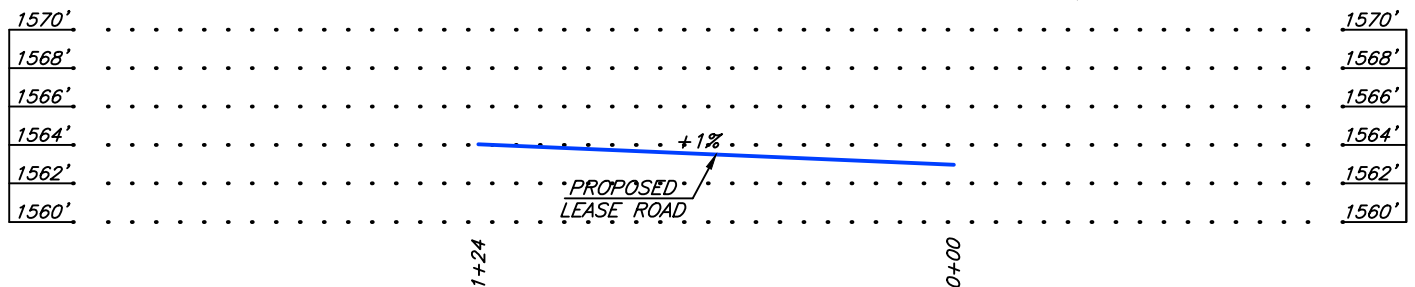
CONTINENTAL  
JETT RYAN #1-13-24XHM  
PROPOSED LOCATION  
Design Elev.=1563.9'

PLAN VIEW  
Scale: 1" = 50'

CONTOUR INTERVAL: 1'

-NOTES-

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- \* The footages and ties shown hereon are from lines of occupation and may not be from actual property corners.



PROFILE VIEW

Scales:  
Horizontal: 1" = 50'  
Vertical: 1" = 10'

-NOTES-

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- \* The footages and ties shown hereon are from lines of occupation and may not be from actual property corners.

SCALE: AS SHOWN

JOB NO.: 7439

DRAW. NO.: 7439-RDPLAN

SHEET SIZE: 8.5" X 11"

SHEET 1 OF 1



SURV. BY: J.W. 10/25/17

DRAWN BY: J.H. 11/02/17

APPROVED BY: L.G.M.



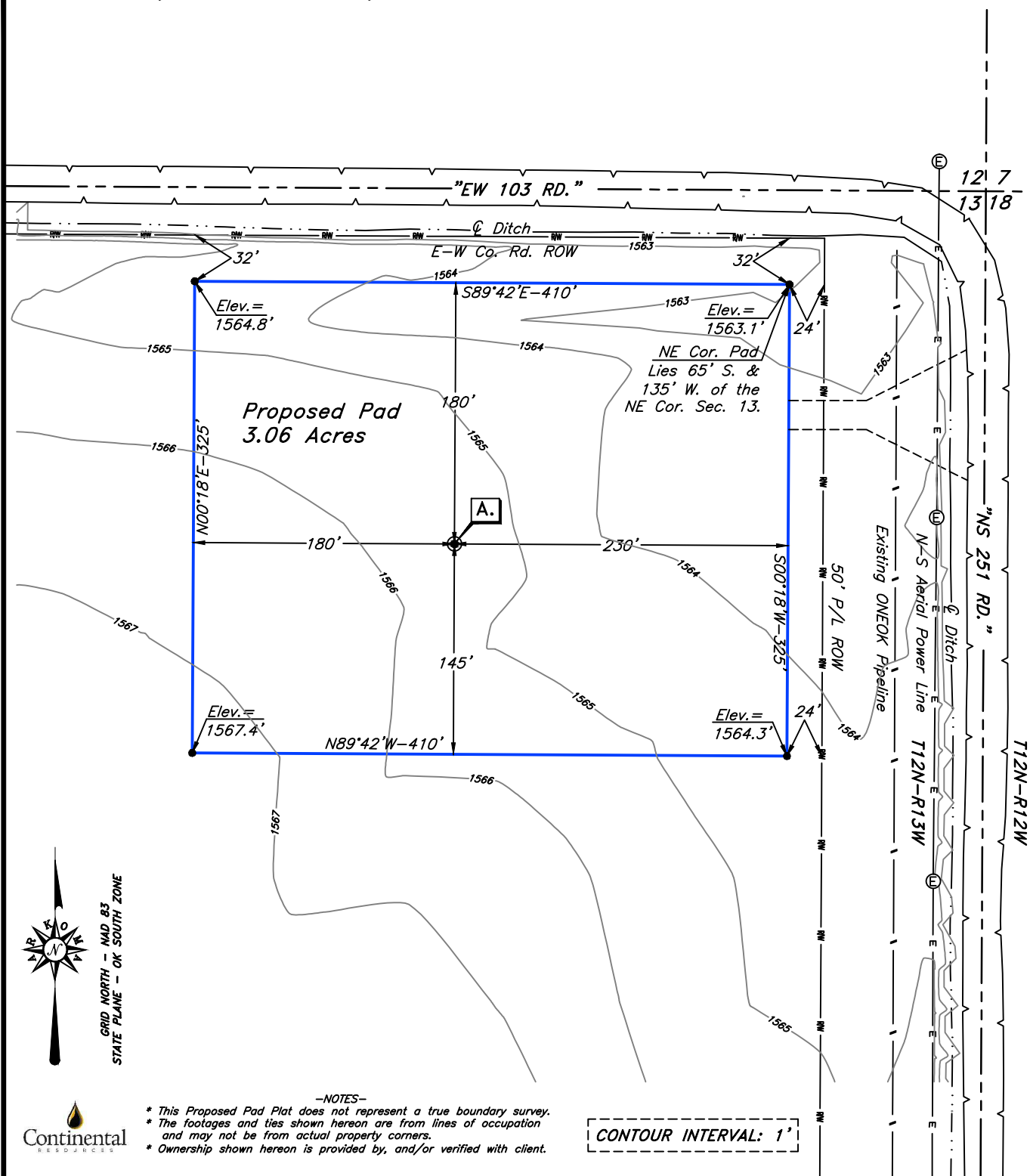
SURVEY & MAPPING BY:  
ARKOMA SURVEYING AND MAPPING, PLLC  
(918)465-5711 P.O. Box 238 C.A. #5348  
(918)465-5030 fax Wilburton, OK 74578 EXP. DATE 6-30-18



SHEET SIZE: 8.5" X 11"

EXISTING CONTOURS FOR A PROPOSED PAD SITE  
IN A PART OF THE NE/4-NE/4 SECTION 13,  
T12N-R13W, CADDO COUNTY, OKLAHOMA

EXHIBIT "I"

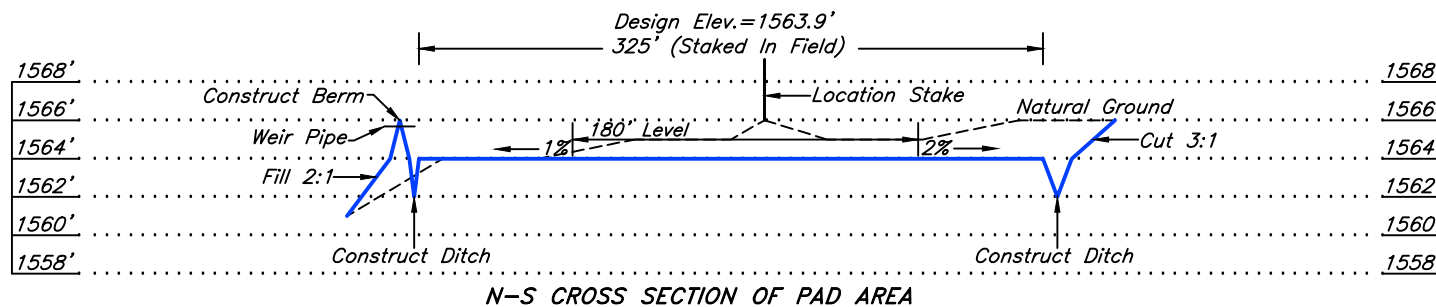


SURVEY & MAPPING BY:  
**ARKOMA SURVEYING & MAPPING, PLLC**  
(918)465-5711 P.O. Box 238 C.A. #5348,  
(918)465-5030 fax Wilburton, OK 74578 EXP. DATE 6-30-18

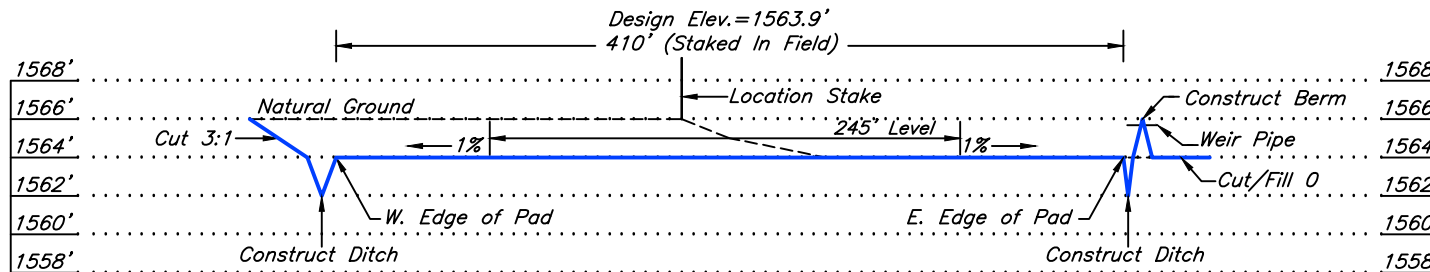
SURV. BY: J.W. 10/25/17	SCALE: 1" = 100'
DRAWN BY: J.H. 10/31/17	JOB NO.: 7439
APPROVED BY: L.G.M	DRAW. NO.: 7439-PADectr
SHEET 1 OF 1	SHEET SIZE: 8.5" X 11"

PLAT SHOWING AN ELEVATION CROSS-SECTION  
FOR A PROPOSED PAD SITE IN A PART OF  
THE NE/4-NE/4 SECTION 13, T12N-R13W,  
CADDO COUNTY, OKLAHOMA

EXHIBIT "J"



Scales:  
Horizontal: 1" = 100'  
Vertical: 1" = 10'



Scales:  
Horizontal: 1" = 100'  
Vertical: 1" = 10'

—NOTES—

- \* This Proposed Pad Plat does not represent a true boundary survey.
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SURVEY & MAPPING BY:

ARKOMA SURVEYING & MAPPING, PLLC  
(918)465-5711 P.O. Box 238  
(918)465-5030 fax Willburton, OK 74578  
C.A. #5348 EXP. DATE 6-30-18



SURV. BY: J.W. 10/25/17 SCALE: 1" = 100'

DRAWN BY: J.H. 11/01/17 JOB NO.: 7439

APPROVED BY: L.G.M. DRAW. NO.: 7439-CROSS

SHEET 1 OF 1 SHEET SIZE: 8.5" X 11"