

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

API NUMBER: 051 24730 A

Approval Date: 10/23/2019  
Expiration Date: 04/23/2021

Horizontal Hole Oil & Gas  
Multi Unit

Amend reason: AMEND SHL & UPDATE ORDERS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 7N Rge: 5W County: GRADY  
SPOT LOCATION: ☐ NW ☐ NE ☐ SE ☐ NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 1630 1985

Lease Name: EMERY Well No: 3-16-9XHW Well will be 1630 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

DUSTY & KELLY RICKS REV TRUST  
PO BOX 933  
BLANCHARD OK 73010

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

Name	Depth	Name	Depth
1 WOODFORD	11489	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 644200  
653269

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201904912  
201904913  
201904916  
201904917

Special Orders:

Total Depth: 20205 Ground Elevation: 1214

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 360

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: 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 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: CHICKASHA

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36753  
H. SEE MEMO

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.

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: CHICKASHA

HORIZONTAL HOLE 1

Sec 09 Twp 7N Rge 5W County GRADY

Spot Location of End Point: NW NE NE NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 2090

Depth of Deviation: 11053

Radius of Turn: 488

Direction: 5

Total Length: 8386

Measured Total Depth: 20205

True Vertical Depth: 11489

End Point Location from Lease,  
Unit, or Property Line: 50

Notes:

Category

Description

DEEP SURFACE CASING

10/15/2019 - 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

10/15/2019 - 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)

INCREASED DENSITY - 704972

11/19/2019 - GC2 - 16-7N-5W  
X644200 WDFD  
6 WELLS  
NO OP. NAMED  
11-7-2019

INCREASED DENSITY - 704973

11/19/2019 - GC2 - 9-7N-5W  
X653269 WDFD  
3 WELLS  
NO OP. NAMED  
11-7-2019

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.

051 24730 EMERY 3-16-9XHW

MEMO	10/15/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - WINTER CREEK WATERSHED), PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 201904916	10/21/2019 - GC2 - (I.O.) 16 & 9-7N-5W EST MULTIUNIT HORIZONTAL WELL X644200 WDFD 16-7N-5W X653269 WDFD 9-7N-5W 33% 16-7N-5W 67% 9-7N-5W CONTINENTAL RESOURCES, INC REC. 10-21-2019 (P. PORTER)
PENDING CD - 201904917	10/21/2019 - GC2 - (I.O.) 16 & 9-7N-5W X644200 WDFD 16-7N-5W X653269 WDFD 9-7N-5W X165:10-3-28(C)(2)(B) WDFD MAY BE CLOSER THAN 600' TO EXISTING AND/OR PROPOSED WELL COMPL. INT. (16-7N-5W) NCT 1,320' FSL, NCT 0' FNL, NCT 1,320' FWL COMPL. INT. (9-7N-5W) NCT 0' FSL, NCT 150' FNL, NCT 1,320' FWL CONTINENTAL RESOURCES, INC REC. 10-21-2019 (P. PORTER)
SPACING - 644200	10/21/2019 - GC2 - (640)(HOR) 16-7N-5W EXT (VER) OTHERS EST (VER) OTHERS EST (HOR) WDFD, OTHER VAC OTHERS COMPL. INT. NCT 330' FB
SPACING - 653269	10/21/2019 - GC2 - (640)(HOR) 9-7N-5W EXT 643068 WDFD, OTHERS EXT OTHER COMPL. INT. NCT 165' FNL/FSL, NCT 330' FEL/FWL

EXHIBIT: A (1 of 4)  
 SHEET: 8.5x11  
 SHL: 16-7N-5W  
 BHL-E3 9-7N-5W  
 BHL-M3 21-7N-5W



## COVER SHEET

## CONTINENTAL RESOURCES, INC.

P.O. BOX 26900 OKLAHOMA CITY, OK 73126 \* (T) 1-800-256-8955 (F) 405-234-9253

Section 16 Township 7N Range 5W I.M.Well: EMERY 3-16-9XHWCounty GRADY State OKWell: MILLS 3-16-21XHWOperator CONTINENTAL RESOURCES, INC.

## NAD-83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W-E3	EMERY 3-16-9XHW	636951	2047939	35° 04' 59.72" -97° 44' 04.15"	35.083255 -97.734486	1630' FNL / 1985' FWL (NW/4 SEC 16)	1211.68'	1214.09'
LP-E3	LANDING POINT	636952	2048044	35° 04' 59.72" -97° 44' 02.89"	35.083255 -97.734135	1630' FNL / 2090' FWL (NW/4 SEC 16)	--	--
BHL-E3	BOTTOM HOLE LOCATION	643812	2048017	35° 08' 07.57" -97° 44' 02.99"	35.102103 -97.734183	50' FNL / 2090' FWL (NW/4 SEC 09)	--	--
W-M3	MILLS 3-16-21XHW	636921	2047939	35° 04' 59.42" -97° 44' 04.15"	35.083172 -97.734486	1660' FNL / 1985' FWL (NW/4 SEC 16)	1211.83'	1214.09'
LP-M3	LANDING POINT	636921	2047901	35° 04' 59.42" -97° 44' 04.61"	35.083172 -97.734613	1660' FNL / 1947' FWL (NW/4 SEC 16)	--	--
PI-1	POINT OF INTERSECT	635940	2047816	35° 04' 49.72" -97° 44' 05.67"	35.080477 -97.734907	2641' FNL / 1861' FWL (NW/4 SEC 16)	--	--
PI-2	POINT OF INTERSECT	633300	2047924	35° 04' 23.60" -97° 44' 04.45"	35.073222 -97.734569	0' FSL / 1964' FWL (SW/4 SEC 16)	--	--
BHL-M3	BOTTOM HOLE LOCATION	628068	2048155	35° 03' 31.83" -97° 44' 01.83"	35.058842 -97.733842	50' FSL / 2196' FWL (SW/4 SEC 21)	--	--
X-1	VIERSEN #1-9	642356	2049699	35° 05' 53.13" -97° 43' 42.80"	35.098092 -97.728556	9-7N-5W:   TD: 12,285'   1,509' FNL / 1,509' FEL	--	--
X-2	EMERY #1-9-16XH	643483	2050824	35° 06' 04.24" -97° 43' 29.22"	35.101179 -97.724783	9-7N-5W:   TD: 6,759'   385' FNL / 382' FEL	--	--
X-3	MIDDLEBERG SWD #1	640333	2047785	35° 05' 33.17" -97° 44' 05.80"	35.092547 -97.734972	9-7N-5W:   TD: 8,050'   1,752' FSL / 1,840' FWL	--	--
X-4	RICKS #7-5-4-1H	642901	2047802	35° 05' 58.57" -97° 44' 05.61"	35.099603 -97.734892	9-7N-5W:   TD: 17,012'   960' FNL / 1,870' FWL	--	--
X-5	MILLS #1-21H	628272	2046949	35° 03' 33.90" -97° 44' 18.33"	35.059416 -97.737870	21-7N-5W:   TD: 16,400'   255' FSL / 890' FWL	--	--
X-6	STRASSLE #1-28-33XH	628634	2046889	35° 03' 37.48" -97° 44' 17.04"	35.060411 -97.738067	21-7N-5W:   TD: 17,873'   617' FSL / 830' FWL	--	--
X-7	EMERY #1R-8-16XH	643450	2050794	35° 06' 03.92" -97° 43' 29.58"	35.101088 -97.724883	9-7N-5W:   TD: 21,281'   418' FNL / 412' FEL	--	--

Certificate of Authorization No. 7318

Date Staked: 08-02-19  
 Date Drawn: 11-13-19



Prepared By:  
 Petro Land Services South  
 10400 Vineyard Blvd.  
 Suite C  
 Oklahoma City, OK 73120

## REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	06-18-19	TJW	ISSUED FOR APPROVAL	---
01	07-30-19	TJW	MOVED PAD NORTH	REV'D ALL EXHIBITS
02	10-7-19	HOG	REV'D ACCESS ROAD	REV'D EXHIBIT F,G & "A"
03	11-13-19	HOG	REV'D MILLS 3 BHL/ADDED PI	REV'D EXHIBIT A1, A2 & A3

EXHIBIT: A (2 of 4)  
 SHEET: 8.5x11  
 SHL: 16-7N-5W  
 BHL-E3 9-7N-5W  
 BHL-M3 21-7N-5W



## COVER SHEET CONTINUED...

### CONTINENTAL RESOURCES, INC.

P.O. BOX 26900 OKLAHOMA CITY, OK 73126 \* (T) 1-800-256-8955 (F) 405-234-9253

Section 16 Township 7N Range 5W I.M.

Well: EMERY 3-16-9XHW

County GRADY State OK

Well: MILLS 3-16-21XHW

Operator CONTINENTAL RESOURCES, INC.

#### NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W-E3	EMERY 3-16-9XHW	636909	2079536	35° 04' 59.48" -97° 44' 03.01"	35.083188 -97.734168	1630' FNL / 1985' FWL (NW/4 SEC 16)	1211.68'	1214.09'
LP-E3	LANDING POINT	636909	2079641	35° 04' 59.48" -97° 44' 01.74"	35.083188 -97.733818	1630' FNL / 2090' FWL (NW/4 SEC 16)	--	--
BHL-E3	BOTTOM HOLE LOCATION	643769	2079614	35° 06' 07.33" -97° 44' 01.84"	35.102037 -97.733846	50' FNL / 2090' FWL (NW/4 SEC 09)	--	--
W-M3	MILLS 3-16-21XHW	636879	2079536	35° 04' 59.18" -97° 44' 03.01"	35.083106 -97.734169	1660' FNL / 1985' FWL (NW/4 SEC 16)	1211.83'	1214.09'
LP-M3	LANDING POINT	636879	2079498	35° 04' 59.18" -97° 44' 03.46"	35.083106 -97.734296	1660' FNL / 1947' FWL (NW/4 SEC 16)	--	--
PI-1	POINT OF INTERSECT	635898	2079412	35° 04' 49.48" -97° 44' 04.52"	35.080410 -97.734590	2641' FNL / 1861' FWL (NW/4 SEC 16)	--	--
PI-2	POINT OF INTERSECT	633258	2079521	35° 04' 23.36" -97° 44' 03.31"	35.073156 -97.734251	0' FSL / 1964' FWL (SW/4 SEC 16)	--	--
BHL-M3	BOTTOM HOLE LOCATION	628024	2079752	35° 03' 31.59" -97° 44' 00.69"	35.058774 -97.733525	50' FSL / 2196' FWL (SW/4 SEC 21)	--	--
X-1	VERSEN #1-9	642314	2081295	35° 05' 52.89" -97° 43' 41.66"	35.098026 -97.728239	9-7N-5W:   TD: 12,285'   1,509' FNL / 1,509' FEL	--	--
X-2	EMERY #1-9-16XH	643441	2082421	35° 06' 04.00" -97° 43' 28.08"	35.101112 -97.724486	9-7N-5W:   TD: 6,759'   385' FNL / 382' FEL	--	--
X-3	MIDDLEBERG SWD #1	640291	2079382	35° 05' 32.93" -97° 44' 04.76"	35.092481 -97.734654	9-7N-5W:   TD: 8,050'   1,752' FSL / 1,840' FWL	--	--
X-4	RICKS #7-5-4-1H	642859	2079399	35° 05' 58.33" -97° 44' 04.47"	35.099537 -97.734574	9-7N-5W:   TD: 17,012'   960' FNL / 1,870' FWL	--	--
X-5	MILLS #1-21H	628230	2078546	35° 03' 33.66" -97° 44' 15.19"	35.059349 -97.737552	21-7N-5W:   TD: 16,400'   255' FSL / 990' FWL	--	--
X-6	STRASSLE #1-28-33XH	628592	2078486	35° 03' 37.24" -97° 44' 15.90"	35.080344 -97.737749	21-7N-5W:   TD: 17,873'   617' FSL / 930' FWL	--	--
X-7	EMERY #1R-9-16XH	643407	2082391	35° 06' 03.68" -97° 43' 28.44"	35.101022 -97.724566	9-7N-5W:   TD: 21,281'   418' FNL / 412' FEL	--	--

Certificate of Authorization No. 7318

Date Staked: 08-02-19  
 Date Drawn: 11-13-19



Prepared By:  
 Petro Land Services South  
 10400 Vineyard Blvd.  
 Suite C  
 Oklahoma City, OK 73120

CURRENT REV.: 3

EXHIBIT: A (3 of 4)  
SHEET: 8.5x14  
SHL: 16-7N-5W  
BHL-E3 9-7N-5W

# PETRO LAND SERVICES SOUTH, LLC

10400 VINEYARD BLVD. SUITE C, OKLA. CITY, OKLA. 73120 • OFFICE (405) 212-3108  
Certificate of Authorization No. 7318



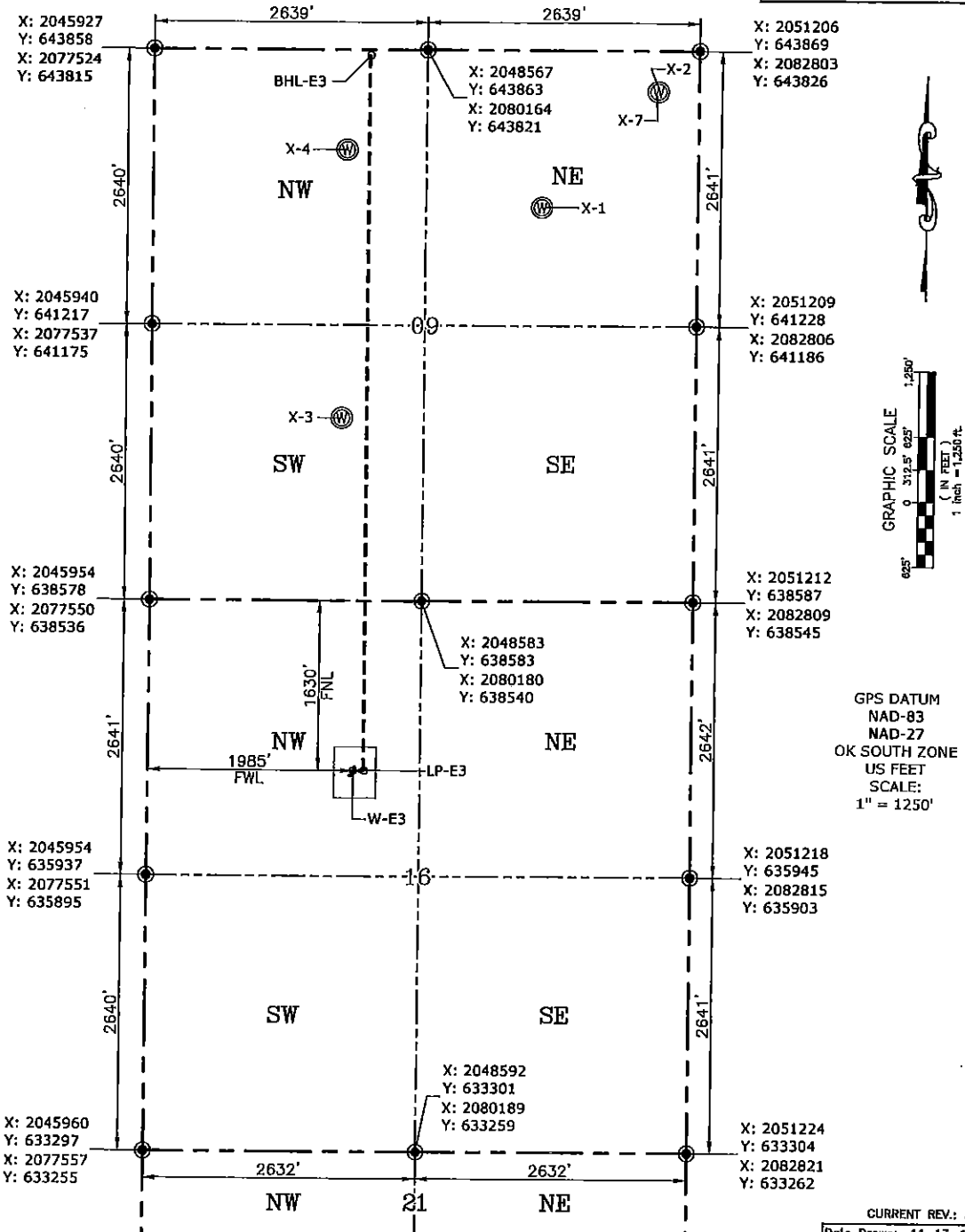
CONTINENTAL  
RESOURCES, INC.  
(OPERATOR)

GRADY

County Oklahoma

1630' FNL-1985' FWL Section 16 Township 7N Range 5W I.M.

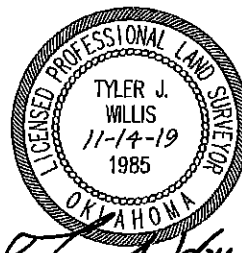
WELL: EMERY 3-16-9XHW



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 PLS 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.

## CERTIFICATE:

I, TYLER J. WILLIS an Oklahoma Licensed Land Surveyor and an authorized agent of Petro Land Services South, LLC, do hereby certify to the information shown herein.



Okla. PLS No.1985 DATE

EXHIBIT: A (4 of 4)  
SHEET: 8.5x14  
SHL: 16-7N-5W  
BHL-M3 21-7N-5W

PETRO LAND SERVICES SOUTH, LLC

10400 VINEYARD BLVD. SUITE C, OKLA. CITY, OKLA. 73120 \* OFFICE (405) 212-3108  
Certificate of Authorization No. 7318



CONTINENTAL  
RESOURCES, INC.  
(OPERATOR)

GRADY

County Oklahoma

1660' FNL-1985' FWL Section 16 Township 7N Range 5W I.M.

WELL: MILLS 3-16-21XHW

X: 2045954  
Y: 638578  
X: 2077550  
Y: 638536

X: 2051212  
Y: 638587  
X: 2082809  
Y: 638545

X: 2048583  
Y: 638583  
X: 2080180  
Y: 638540

X: 2045954  
Y: 635937  
X: 2077551  
Y: 635895

X: 2051218  
Y: 635945  
X: 2082815  
Y: 635903

X: 2045960  
Y: 633297  
X: 2077557  
Y: 633255

X: 2051224  
Y: 633304  
X: 2082821  
Y: 633262

X: 2045960  
Y: 630657  
X: 2077557  
Y: 630615

X: 2051233  
Y: 630664  
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Y: 630622

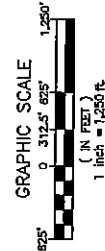
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Y: 628018  
X: 2077556  
Y: 627976

X: 2051240  
Y: 628017  
X: 2082837  
Y: 627975

X-6  
X-5

BHL-M3

X: 2048602  
Y: 628016  
X: 2080199  
Y: 627974



GPS DATUM  
NAD-83  
NAD-27  
OK SOUTH ZONE  
US FEET  
SCALE:  
1" = 1250'

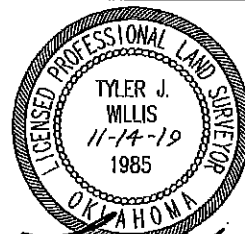
CURRENT REV: 3

Date Drawn: 11-13-19

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Oklahoma PLS No.1985 DATE