

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

API NUMBER: 011 24200

Approval Date: 03/25/2019

Expiration Date: 09/25/2020

Horizontal Hole  
Oil & Gas  
Multi Unit

PERMIT TO DRILL

WELL LOCATION: Sec: 02 Twp: 16N Rge: 13W County: BLAINE  
SPOT LOCATION: ☐ SW ☐ NE ☐ NE ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST  
SECTION LINES: 357 438

Lease Name: KNUTSON Well No: 3-2-11XHM Well will be 357 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

GERALD L. KNUTSON  
14916 TOMASHA DRIVE  
INDEPENDENCE MO 64055

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	10551	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201900529  
201900528  
201900535  
201900536

Special Orders:

Total Depth: 20541 Ground Elevation: 1641 Surface Casing: 220 Depth to base of Treatable Water-Bearing FM: 120

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: 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: MARLOW

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36257  
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: MARLOW

## HORIZONTAL HOLE 1

Sec 11 Twp 16N Rge 13W County BLAINE

Spot Location of End Point: S2 SE SE SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 10166

Radius of Turn: 395

Direction: 179

Total Length: 9754

Measured Total Depth: 20541

True Vertical Depth: 11281

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

### Notes:

#### Category

#### Description

#### HYDRAULIC FRACTURING

3/1/2019 - 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: [OCCWEB.COM/OG/OGFORMS.HTML](http://OCCWEB.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)

#### INTERMEDIATE CASING

3/1/2019 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES

#### MEMO

3/1/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

#### PENDING CD - 201900528

3/18/2019 - GB1 - (640) 11-16N-13W  
VAC 87122 MISS  
VAC 159742 CSTR  
EXT 668965 MSSP, OTHER  
REC 3/12/2019 (MINMIER)

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.

011 24200 KNUTSON 3-2-11XHM

Category	Description
PENDING CD - 201900529	3/18/2019 - GB1 - (640) 2-16N-13W VAC 87122 MISS VAC 357576 CSTR EXT 593865 MSSP, OTHER REC 3/12/2019 (MINMIER)
PENDING CD - 201900535	3/18/2019 - GB1 - (I.O.) 2 & 11-16N-13W EST MULTIUNIT HORIZONTAL WELL X201900529 MSSP 2-16N-13W X201900528 MSSP 11-16N-13W 50% 2-16N-13W 50% 11-16N-13W NO OP. NAMED REC. 3/15/2019 (DENTON)
PENDING CD - 201900536	3/18/2019 - GB1 - (I.O.) 2 & 11-16N-13W X201900529 MSSP 2-16N-13W X201900528 MSSP 11-16N-13W SHL (2-16N-13W) 368' FNL, 448' FEL*** COMPL. INT. (2-16N-13W) NCT 150' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (11-16N-13W) NCT 0' FNL, NCT 150' FSL, NCT 330' FEL NO OP. NAMED REC. 3/15/2019 (DENTON)
	*** ITD HAS SHL AS 357' FNL, 438' FEL; TO BE CORRECTED AS HEARING FOR FINAL ORDER PER ATTORNEY FOR OPERATOR

EXHIBIT: A (1 of 2)  
 SHEET: 8.5x11  
 SHL: 2-16N-13W  
 BHL-3 11-16N-13W



## COVER SHEET

## CONTINENTAL RESOURCES, INC.

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

Section 2 Township 16N Range 13W I.M.Well: KNUTSON 3-2-11XHMCounty BLAINE State OKWell: --Operator CONTINENTAL RESOURCES, INC.

NAD-83

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W3	KNUTSON 3-2-11XHM	327273	1807097	35° 53' 52.13" -98° 32' 41.83"	35.897814 -98.544953	357' FNL / 438' FEL (NE/4 SEC 2)	1640.62'	1641.41'
LP-3	LANDING POINT	327272	1807204	35° 53' 52.13" -98° 32' 40.52"	35.897814 -98.544589	357' FNL / 330' FEL (NE/4 SEC 2)	--	--
BHL-3	BOTTOM HOLE LOCATION	317212	1807218	35° 52' 12.65" -98° 32' 39.66"	35.870180 -98.544351	50' FSL / 330' FEL (SE/4 SEC 11)	--	--
X-1	CRAIN #1-11 (LEONA B CRAIN)	319380	1803966	35° 52' 33.90" -98° 33' 19.34"	35.876083 -98.555371	11-16N-13W   TD: 12,147'   2,170' FSL / 1,683' FWL	--	--
X-2	SMOOT #1	320481	1805582	35° 52' 44.88" -98° 32' 59.78"	35.879133 -98.549938	11-16N-13W   TD: 9,810'   1,975' FNL / 1,969' FEL	--	--
X-3	CRAIN #1-11	319558	1804084	35° 52' 35.67" -98° 33' 17.91"	35.876575 -98.554974	11-16N-13W   TD: 9,740'   2,350' FSL / 1,800' FWL	--	--
X-4	CRAIN #11-2	320481	1803612	35° 52' 44.77" -98° 33' 23.71"	35.879103 -98.556586	11-16N-13W   TD: 9,685'   1,986' FNL / 1,320' FWL	--	--
X-5	LEONA #1-11	319502	1804484	35° 52' 35.14" -98° 33' 13.05"	35.876428 -98.553625	11-16N-13W   TD: 9,532'   2,300' FSL / 2,200' FWL	--	--

NAD-27

POINT	WELL NAME	NORTHING	EASTING	LATITUDE LONGITUDE	LATITUDE LONGITUDE		EXISTING ELEVATION	DESIGN ELEVATION
W3	KNUTSON 3-2-11XHM	327248	1838698	35° 53' 51.98" -98° 32' 40.55"	35.897771 -98.544596	357' FNL / 438' FEL (NE/4 SEC 2)	1640.62'	1641.41'
LP-3	LANDING POINT	327247	1838806	35° 53' 51.98" -98° 32' 39.24"	35.897771 -98.544233	357' FNL / 330' FEL (NE/4 SEC 2)	--	--
BHL-3	BOTTOM HOLE LOCATION	317188	1838820	35° 52' 12.49" -98° 32' 38.38"	35.870137 -98.543995	50' FSL / 330' FEL (SE/4 SEC 11)	--	--
X-1	CRAIN #1-11 (LEONA B CRAIN)	319355	1835567	35° 52' 33.74" -98° 33' 18.05"	35.876039 -98.555014	11-16N-13W   TD: 12,147'   2,170' FSL / 1,683' FWL	--	--
X-2	SMOOT #1	320456	1837183	35° 52' 44.72" -98° 32' 58.49"	35.879090 -98.549581	11-16N-13W   TD: 9,810'   1,975' FNL / 1,969' FEL	--	--
X-3	CRAIN #1-11	319533	1835686	35° 52' 35.51" -98° 33' 16.62"	35.876531 -98.554618	11-16N-13W   TD: 9,740'   2,350' FSL / 1,800' FWL	--	--
X-4	CRAIN #11-2	320456	1835214	35° 52' 44.61" -98° 33' 22.42"	35.879060 -98.556229	11-16N-13W   TD: 9,685'   1,986' FNL / 1,320' FWL	--	--
X-5	LEONA #1-11	319477	1836085	35° 52' 34.98" -98° 33' 11.77"	35.876384 -98.553268	11-16N-13W   TD: 9,532'   2,300' FSL / 2,200' FWL	--	--

Certificate of Authorization No. 7318

Date Staked: 12-10-18  
 Date Drawn: 12-6-18



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

## REVISIONS

No.	DATE	BY	DESCRIPTION	COMMENTS
00	12-6-18	HOG	ISSUED FOR APPROVAL	--
01	3-19-19	HOG	MOVED WELL HEAD	REV'D EXHIBIT A(1&2),B,D,E,H,I

EXHIBIT: A (2 of 2)  
SHEET: 8.5x14  
SHL: 2-16N-13W  
BHL-3 11-16N-13W

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)

BLAINE County Oklahoma  
357' FNL-438' FEL Section 2 Township 16N Range 13W I.M.

WELL:KNUTSON 3-2-11XHM

X: 1802282  
Y: 327662  
X: 1833884  
Y: 327637

X: 1804907  
Y: 327644  
X: 1836509  
Y: 327619

X: 1807533  
Y: 327627  
X: 1839135  
Y: 327602

X: 1802295  
Y: 325118  
X: 1833897  
Y: 325093

X: 1804931  
Y: 322459  
X: 1836533  
Y: 322434

X: 1807542  
Y: 325086  
X: 1839144  
Y: 325061

X: 1802309  
Y: 322475  
X: 1833911  
Y: 322450

X: 1807552  
Y: 322443  
X: 1839154  
Y: 322419

X: 1802287  
Y: 319855  
X: 1833888  
Y: 319830

X-1  
X-3  
X-5

X: 1807550  
Y: 319801  
X: 1839152  
Y: 319776

X: 1802264  
Y: 317234  
X: 1833866  
Y: 317209

X: 1804906  
Y: 317196  
X: 1836508  
Y: 317171

X: 1807548  
Y: 317158  
X: 1839150  
Y: 317133



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

CURRENT REV.: 1

Date Drawn: 12-6-18

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.



*Tyler J. Willis*  
Oklahoma PLS No.1985 DATE

EXHIBIT: B  
SHEET: 8.5x11  
SHL: 2-16N-13W  
BHL-3 11-16N-13W

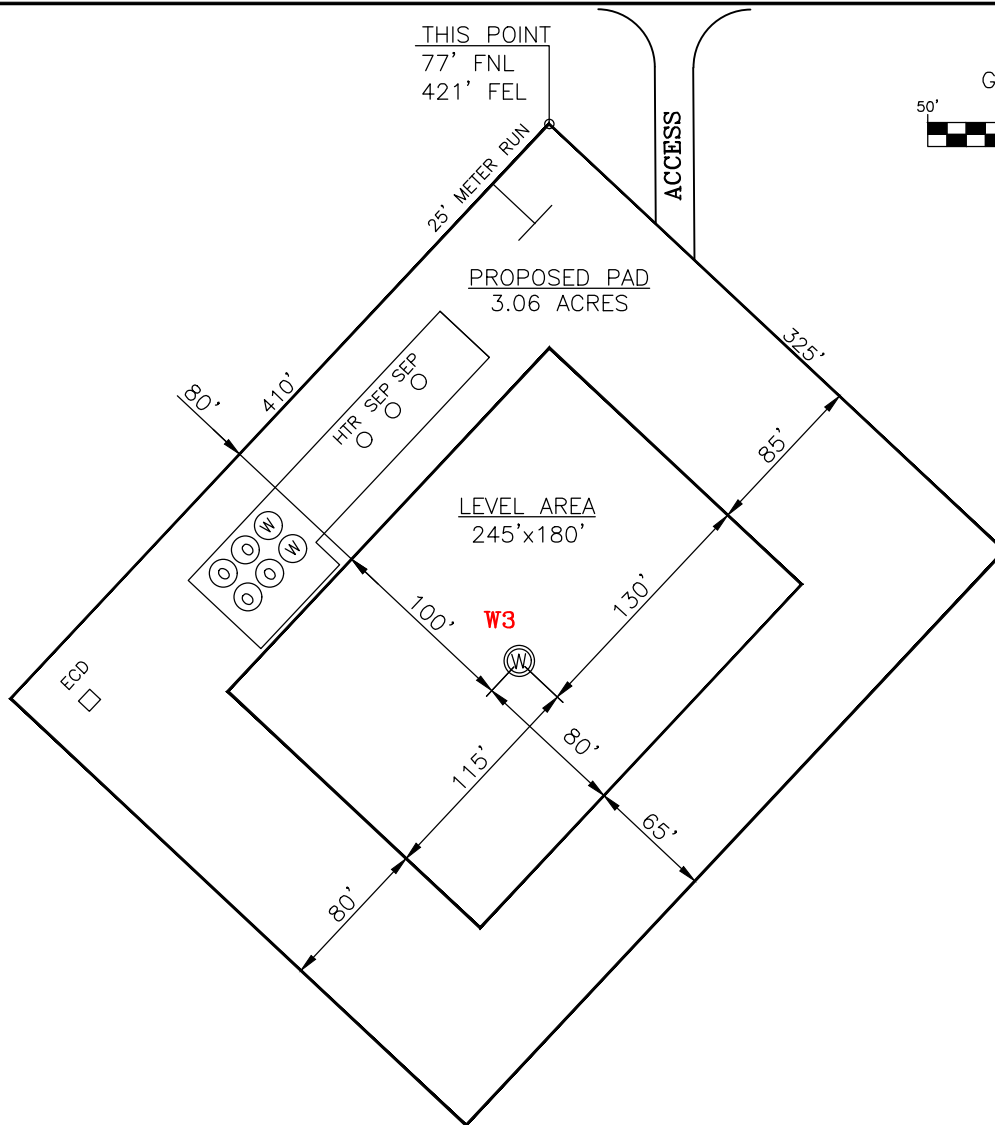
# PETRO LAND SERVICES SOUTH, LLC

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



CONTINENTAL  
RESOURCES, INC  
(OPERATOR)

BLAINE County Oklahoma  
357' FNL-438' FEL Section 2 Township 16N Range 13W I.M.



CURRENT REV.: 1

DATUM: NAD-83  
LAT: 35°53'52.13"  
LONG: -98°32'41.83"  
LAT: 35.897814°  
LONG: -98.544953°

STATE PLANE  
COORDINATES  
(US FEET): OK NORTH

X: 1807097  
Y: 327273

Operator: CONTINENTAL RESOURCES, INC.

Lease Name: --

Topography & Vegetation: Pasture

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set: No

Best Accessibility to Location: From The North Line

Distance & Direction From Hwy. or Town: Leaving Watonga, head west on SH-3 for 5.96 miles & turn right on N-2510. Head north for 3.95 miles & turn left on E-0770 Rd. Head west for 1.06 miles to the proposed access road

THE INFORMATION SHOWN HEREIN IS FOR  
CONSTRUCTION PURPOSES ONLY

LANDING POINT, BOTTOM HOLE AND DRILL PATH  
INFORMATION PROVIDED BY OPERATOR LISTED,  
NOT SURVEYED.

Well W3: KNUTSON 3-2-11XHM

Well --: --

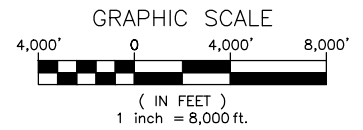
(This Information Was Gathered  
With a GPS Receiver With ±1  
Foot Horiz./Vert. Accuracy)

Certificate of Authorization No. 7318

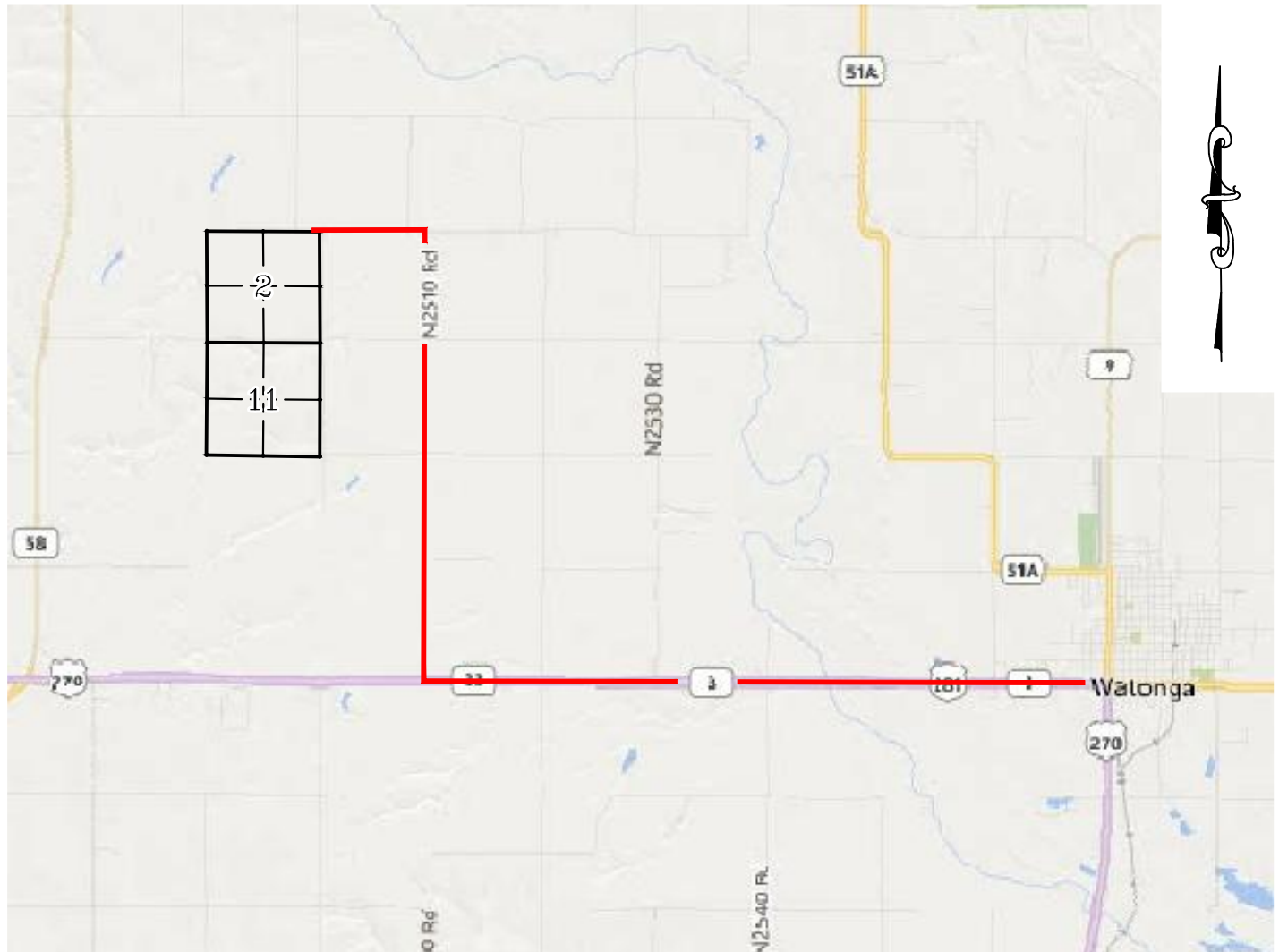


Prepared By:  
Petro Land Services South  
10400 Vineyard Blvd.  
Suite C  
Oklahoma City, OK 73120

EXHIBIT: C  
SHEET: 8.5x11  
SHL: 2-16N-13W  
BHL-3 11-16N-13W



## VICINITY MAP



LEAVING WATONGA, HEAD WEST ON SH-3 FOR 5.96 MILES & TURN RIGHT ON N-2510. HEAD NORTH FOR 3.95 MILES & TURN LEFT ON E-0770 RD. HEAD WEST FOR 1.06 MILES TO THE PROPOSED ACCESS ROAD

### CONTINENTAL RESOURCES, INC.

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

Certificate of Authorization No. 7318

Section 2 Township 16N Range 13W I.M. Well W3: KNUTSON 3-2-11XHM

County BLAINE State OK Well --: --

Operator CONTINENTAL RESOURCES, INC.



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

CURRENT REV.: 1



EXHIBIT: D  
 SHEET: 8.5x11  
 SHL: 2-16N-13W  
 BHL-3 11-16N-13W



WELL W3: KNUTSON 3-2-11XHM  
 WELL --: --

## FACING NORTH



## FACING SOUTH



CURRENT REV.: 1



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

## TERRAIN

DRAWN BY:	HDG	SCALE:	N.T.S.
CHECKED BY:	MJL	JOB No.:	--
APPROVED BY:	--	DWG. NO.:	TERRAIN-1
DATE ISSUED:	12-6-18	SHEET:	1 OF 2



EXHIBIT: E  
 SHEET: 8.5x11  
 SHL: 2-16N-13W  
 BHL-3 11-16N-13W



WELL W3: KNUTSON 3-2-11XHM  
 WELL --: --

## FACING EAST



## FACING WEST



CURRENT REV.: 1



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

## TERRAIN

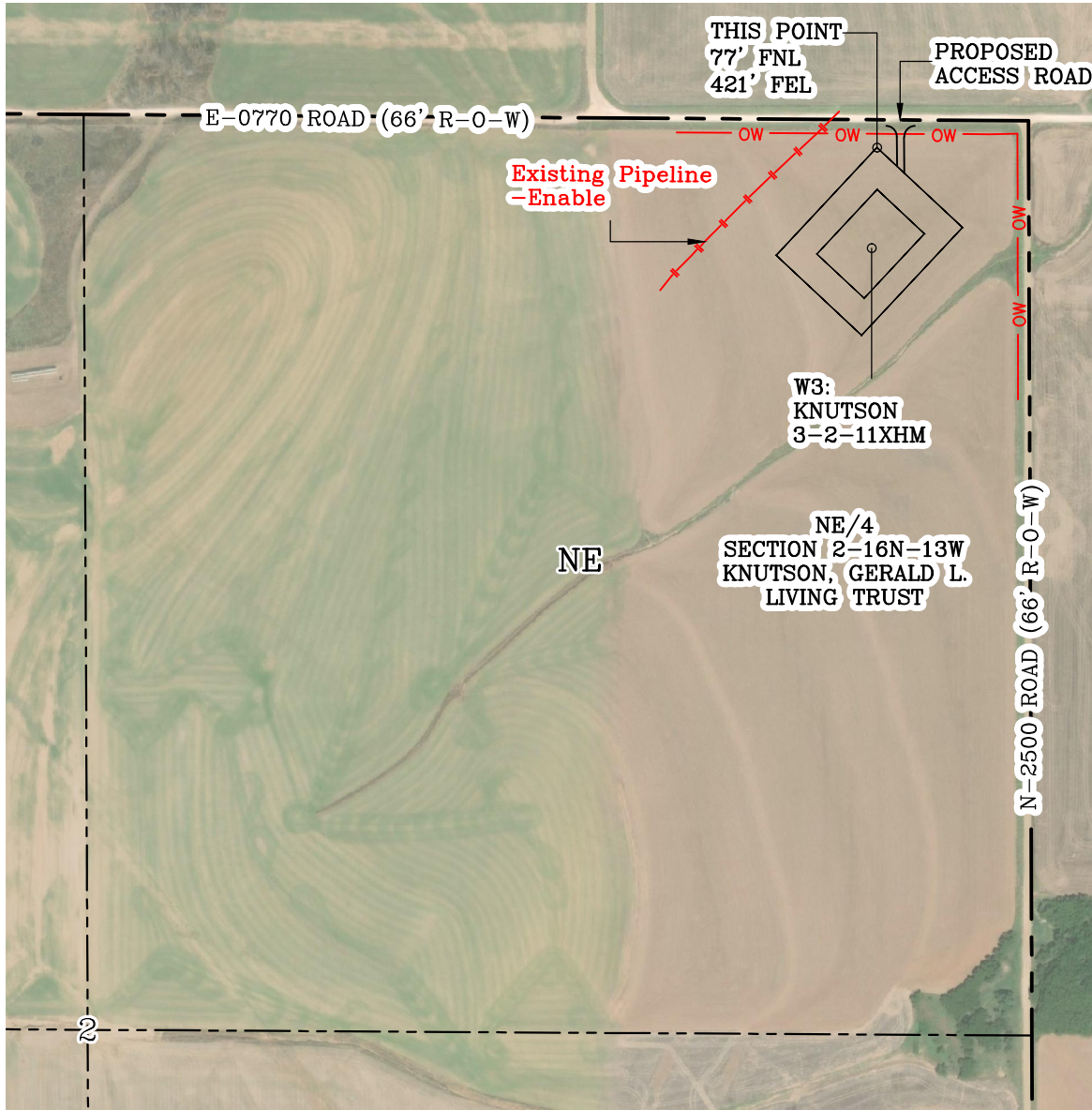
DRAWN BY:	HDG	SCALE:	N.T.S.
CHECKED BY:	MJL	JOB No.:	--
APPROVED BY:	--	DWG. NO.:	TERRAIN-2
DATE ISSUED:	12-6-18	SHEET:	2 OF 2

EXHIBIT: F  
SHEET: 8.5x11  
SHL: 2-16N-13W  
BHL-3 11-16N-13W



WELL W3: KNUTSON 3-2-11XHM  
WELL --: --

PROPOSED ACCESS ROAD = 131' | 7.94 RODS (TOTAL)

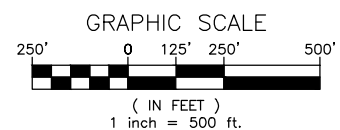


GPS DATUM - OK NORTH ZONE  
US FEET SCALE: 1" = 500'

Section 2 Township 16N Range 13W I.M.

County BLAINE State OK

Operator CONTINENTAL RESOURCES, INC.



CURRENT REV.: 1

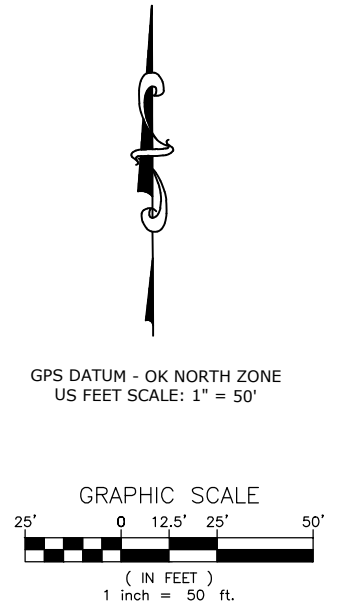
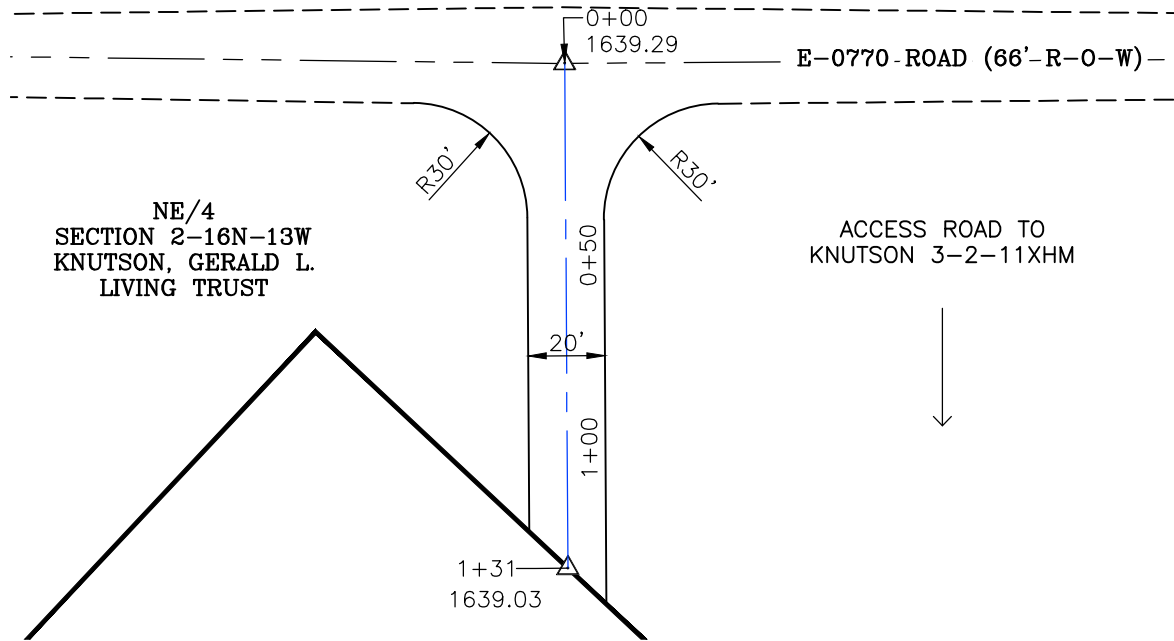


Prepared By:  
Petro Land Services South  
10400 Vineyard Blvd.  
Suite C  
Oklahoma City, OK 73120

AERIAL PLAT

DRAWN BY:	HDG	SCALE:	1" = 500'
CHECKED BY:	MJL	JOB No.:	--
APPROVED BY:	--	DWG. NO.:	AERIAL-1
DATE ISSUED:	12-6-18	SHEET:	1 OF 4

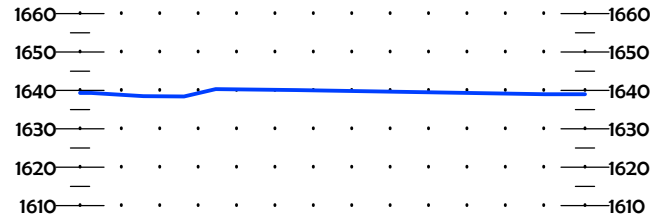
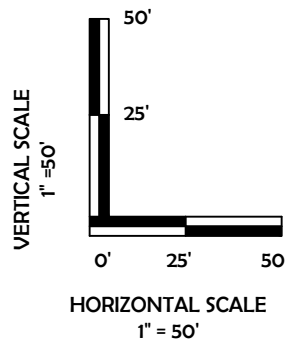
EXHIBIT: G  
 SHEET: 8.5x11  
 SHL: 2-16N-13W  
 BHL-3 11-16N-13W



- \* 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.

Well W3: KNUTSON 3-2-11XHM  
 Well --: --

PROPOSED ACCESS ROAD = 131' | 7.94 RODS (TOTAL)



CURRENT REV.: 1



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



P.O. Box 26900  
 Oklahoma City  
 Oklahoma, 73126  
 (T) 1-800-256-8955  
 (F) 405-234-9253

## LEASE ROAD PLAN & PROFILE

DRAWN BY:	HDG	SCALE:	AS NOTED
CHECKED BY:	MJL	JOB No.:	--
APPROVED BY:	--	DWG. NO.:	P&P
DATE ISSUED:	12-6-18	SHEET:	2 OF 4

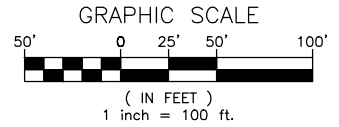


EXHIBIT: H  
SHEET: 8.5x11  
SHL: 2-16N-13W  
BHL-3 11-16N-13W

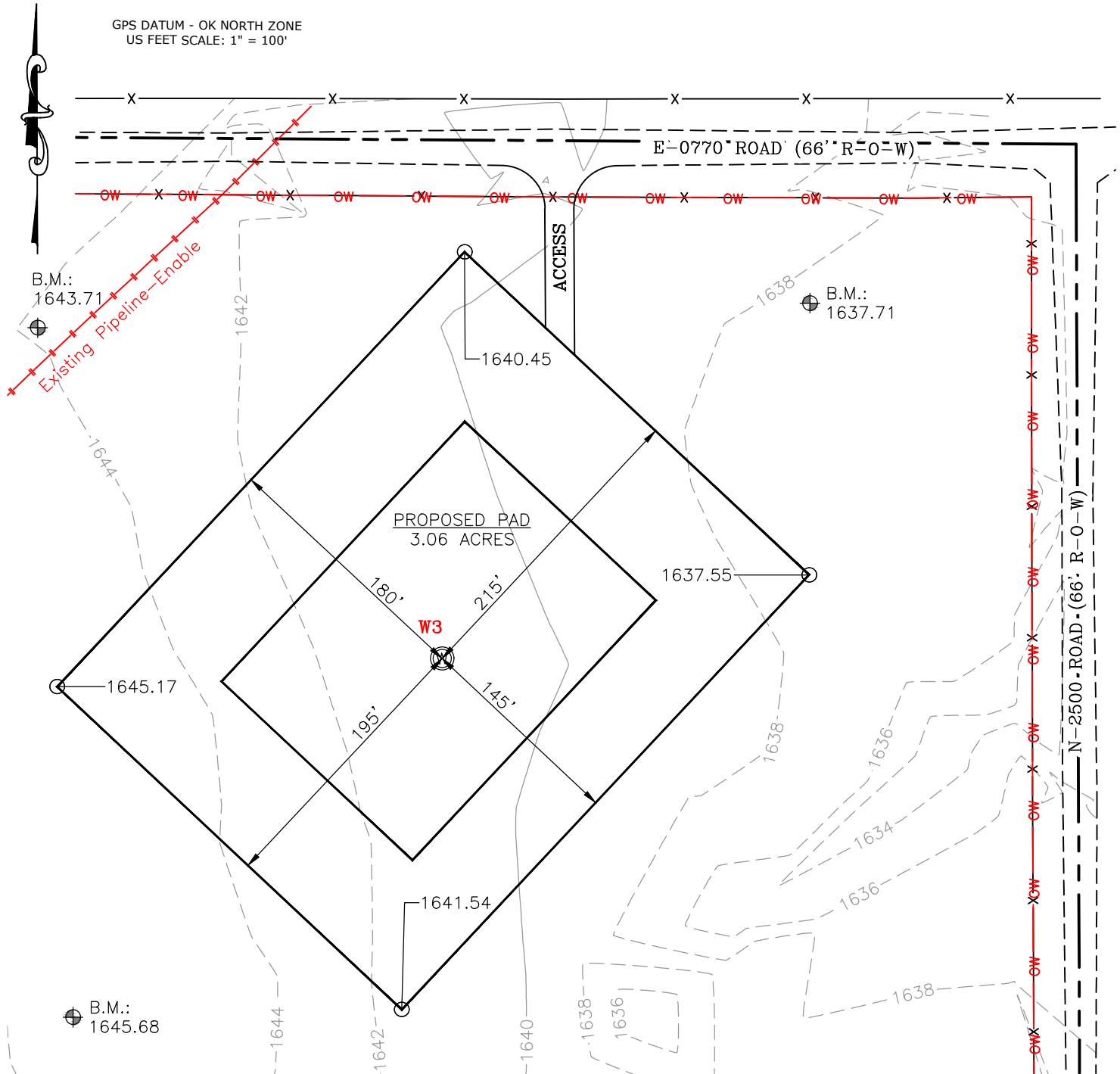


WELL W3: KNUTSON 3-2-11XHM

WELL --: --



GPS DATUM - OK NORTH ZONE  
US FEET SCALE: 1" = 100'



CURRENT REV.: 1



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

## EXISTING GRADING PLAN

DRAWN BY:	HDG	SCALE:	1" = 100'
CHECKED BY:	MJL	JOB No.:	--
APPROVED BY:	--	DWG. NO.:	EX-GR.
DATE ISSUED:	12-6-18	SHEET:	3 OF 4

