## API NUMBER: 011 23873

Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

Horizontal Hole

Oil & Gas

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

Approval Date:	11/06/2017
Expiration Date:	05/06/2018

## PERMIT TO DRILL

SE	ection Lines: 214	0 271		
Lease Name: TIGER SWALLOWTAIL 7_6-15N-13W	Well No: 1H)	<b>(</b>	Well will be 271 feet from nearest unit or lease boundary.	
Operator DEVON ENERGY PRODUCTION CO LI Name:		Telephone: 4052353611; 4052353	OTC/OCC Number: 20751 0	
DEVON ENERGY PRODUCTION CO LP		HOLLYPS		
333 W SHERIDAN AVE		HOLLY DOAK		
OKLAHOMA CITY, OK 73102-5010		P.O. BOX		
		HAILEYVII	LLE OK 74546	
formation(s) (Permit Valid for Listed Forma	tions Only):			
Name	Depth	Name	Depth	
1 MISSISSIPPIAN	11790	6		
2 WOODFORD	12525	7		
3		8		
4		9		
5		10		
eacing Orders: 668553 668554	Location Exception Orde	ers:	Increased Density Orders:	
ending CD Numbers: 201706596			Special Orders:	
201706597				
Total Depth: 20042 Ground Elevation: 1653	Surface Cas	sing: 1999	Depth to base of Treatable Water-Bearing FM: 150	
Under Federal Jurisdiction: No	Fresh Water Sup	ply Well Drilled: No	Surface Water used to Drill: Yes	
PIT 1 INFORMATION		Approved Method for d	isposal of Drilling Fluids:	
ype of Pit System: CLOSED Closed System Means Stee	I Pits			
ype of Mud System: WATER BASED		D. One time land appl	ication – (REQUIRES PERMIT) PERMIT NO: 17-332	
hlorides Max: 8000 Average: 5000		H. SEE MEMO		
depth to top of ground water greater than 10ft below base of	of pit? Y			
/ithin 1 mile of municipal water well? N				
/ellhead Protection Area? N				
it is located in a Hydrologically Sensitive Area.				
ategory of Pit: C				

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 AP/TE DEPOSIT
Pit Location Formation: TERRACE

## HORIZONTAL HOLE 1

Sec 06 Twp 15N Rge 13W County BLAINE

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 50
Feet From: WEST 1/4 Section Line: 380

Depth of Deviation: 10900

Radius of Turn: 477

Direction: 1

Total Length: 8393

Total Length. 6393

Measured Total Depth: 20042

True Vertical Depth: 12525

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

Address
RAVEN RIDGE RANCH LLC
P.O. BOX 1477
KENT DOUGLAS DOBBINS
1513 D STREET

JEREMY DOAK 14720 E. VALLEY VIEW DR.

City, State, Zip
CLINTON, OK 73601
BLACKWELL, OK 74631
PIEDMONT, SD 57769

Notes:

Category

Description

**DEEP SURFACE CASING** 

10/18/2017 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

10/18/2017 - 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

INTERMEDIATE CASING

10/18/2017 - 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

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.

Category

Description

MEMO

10/18/2017 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 -OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201706596

11/3/2017 - G75 - (I.O.) 7 & 6-15N-13W EST MULTIUNIT HORIZONTAL WELL X668554 MSSP, WDFD 7-15N-13W X668553 MSSP, WDFD 6-15N-13W

(WDFD ADJACENT COMMON SOURCE OF SUPPLY TO MSSP)

33% 7-15N-13W 67% 6-15N-13W

DEVON ENERGY PROD. CO., L.P.

REC 10-31-2017 (DUNN)

PENDING CD - 201706597

11/3/2017 - G75 - (I.O.) 7 & 6-15N-13W X668554 MSSP, WDFD 7-15N-13W X668553 MSSP, WDFD 6-15N-13W COMPL. INT. (7-15N-13W) NCT 2140' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (6-15N-13W) NCT 0' FSL, NCT 165' FNL, NCT 330' FWL

DEVON ENERGY PROD. CO., L.P.

REC 10-31-2017 (DUNN)

**SPACING - 668553** 

11/3/2017 - G75 - (640)(HOR) 6-15N-13W VAC 389053 CSTR, MSSLM

EST MSSP, WDFD

POE TO BHL (MSSP) NCT 660' FB

POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL

**SPACING - 668554** 

11/3/2017 - G75 - (640)(HOR) 7-15N-13W

EST MSSP, WDFD

POE TO BHL (MSSP) NCT 660' FB

POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL

300 Pointe Parkway Blvd. Yukon, OK 73099 40.5 787 6270 t 40.5 787 6276 f www.craftontull.com Crafton Tull

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, L.P.

LEASE NAME: TIGER SWALLOWTAIL 7\_6-15N-13W

WELL NO. 1HX GOOD DRILL SITE: YES

**BLAINE** COUNTY, STATE:OK

**GROUND ELEVATION:**1652.94' GR. AT STAKE SURFACE HOLE FOOTAGE: 271' FWL - 2140' FSL

SECTION: 7 TOWNSHIP: T15N RANGE: R13W

BOTTOM HOLE: 6-T15N-R13W,I.M.

ACCESSIBILITY TO LOCATION: FROM WEST LINE

TOPOGRAPHY & VEGETATION:

LOCATION FELL IN A FIELD

**DISTANCE & DIRECTION FROM HWY JCT OR TOWN:** FROM THE TOWN WATONGA HEAD WEST ON OK-33 12MI± TO N2450RD, HEAD SOUTH 2.3MI±. PAD SITE IS LOCATED E OF ROAD.

PLEASE NOTE THAT THIS LOCATION WAS STAKED ON THE GROUND UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LAND SURVEYOR, BUT ACCURACY OF THIS EXHIBIT IS NOT GUARANTEED. PLEASE CONTACT CRAFTON TULL PROMPTLY IF ANY INCONSISTENCY IS DETERMINED, GPS DATA IS OBSERVED FROM RTK-GPS.

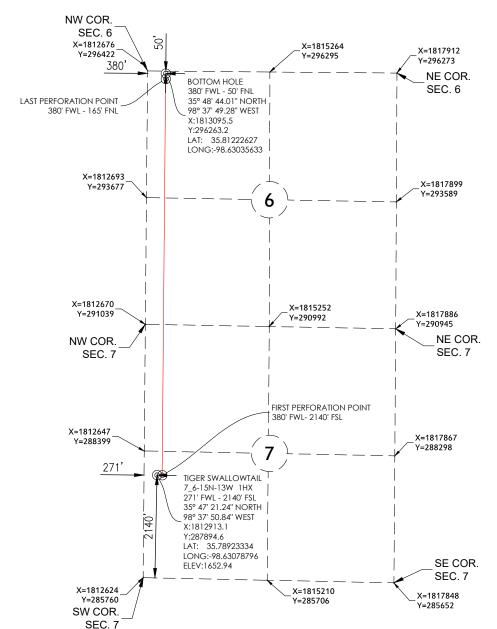
OBSERVED FROM RIK-GPS.

NOTE:X AND Y DATA SHOWN HEREON FOR SECTION CORNERS MAY NOT HAVE BEEN SURVEYED ON THE GROUND, AND FURTHER, <u>DOES NOT</u> 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, <u>DOES NOT</u> REPRESENT A TRUE BOUNDARY SURVEY.

API 011-23873

**COUNTY, OKLAHOMA BLAINE** <u>271' FWL - 2140' FSL</u> **SECTION** <u>7</u> **TOWNSHIP** <u>15N</u> **RANGE** <u>13W</u> **I.M.** 





## **SURFACE HOLE DATA** STATE PLANE COORDINATES:

**ZONE:** OK-NORTH NAD27

X: 1812913.1

GPS DATUM: NAD27

LAT: <u>35.78923334</u> LONG: -98.63078796

**STATE PLANE COORDINATES: ZONE: OK-NORTH NAI** 

X: 1781311.5

**GPS DATUM: NAD83 LAT**: <u>35.78928015</u> LONG: <u>-98.63114600</u>

BOTTOM HOLE DATA
STATE PLANE COORDINATES:

**ZONE:** OK-NORTH NAD2 **X**: 1813095.5 **Y**: 296288.4

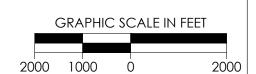
GPS DATUM: NAD27 **LAT:** 35.81222627 LONG: <u>-98.63035633</u>

**STATE PLANE COORDINATES: ZONE**: OK-NORTH NAD83 **X**: 1781493.7

GPS DATUM: NAD83 LAT: 35.81227243 LONG: -98.63071482

**BOTTOM HOLE** INFORMATION PROVIDED BY OPERATOR LISTED.





REVISION	"TIGER SWALLOWTAIL 7_6-15N-13W 1HX"  PART OF THE SW/4 OF SECTION 7, T-15-N, R-13-W PROPOSED DRILL SITE BLAINE COUNTY, OKLAHOMA			
				devon
	SCALE: 1" = 2000' PLOT DATE: 08-31-2017	DRAWN BY: S	SHEET NO.:	1 OF 6