API NUMBER: 017 25276

Oil & Gas

Horizontal Hole

Spacin

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

Approval Date: 09/17/2018
Expiration Date: 03/17/2020

## PERMIT TO DRILL

EAST

WELL LOCATION:	Sec:	06	Twp:	14N	Rge:	9W	County	CAN	NADIAN	
SPOT LOCATION:	NW	SW	N	N	NF		FEET FROM QUARTER:	FROM	NORTH	F

SECTION LINES: **670 2365** 

Lease Name: ML 6\_7-14N-9W Well No: 9HX Well will be 670 feet from nearest unit or lease boundary.

Operator DEVON ENERGY PRODUCTION CO LP Telephone: 4052353611; 4052353 OTC/OCC Number: 20751 0

DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE

OKLAHOMA CITY, OK 73102-5015

LOTOCKA, LLC P.O. BOX 495

OKARCHE OK 73762

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

	Name	Depth	Name	Depth		
1	MISSISSIPPIAN (LESS CHESTER)	10510	6			
2	MISSISSIPPIAN SOLID	10510	7			
3	WOODFORD	11140	8			
4	HUNTON	11280	9			
5			10			
ing Orders: 641963 485777		Location Exception Orders:		Increased Density Orders:		
		,				
	582003					

Pending CD Numbers: 201805737

201805738 201805743 201805744

Total Depth: 20793 Ground Elevation: 1477 Surface Casing: 640 Depth to base of Treatable Water-Bearing FM: 440

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: DOG CREEK

Special Orders:

H. SEE MEMO

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

PERMIT NO: 18-35231

## 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 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: DOG CREEK

## **HORIZONTAL HOLE 1**

Sec 07 Twp 14N Rge 9W County CANADIAN

Spot Location of End Point: SE SW SW SE
Feet From: SOUTH 1/4 Section Line: 50
Feet From: EAST 1/4 Section Line: 2020

Depth of Deviation: 10734 Radius of Turn: 477 Direction: 178

Total Length: 9309

Measured Total Depth: 20793

True Vertical Depth: 11280

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

INTERMEDIATE CASING

Notes:

Category Description

HYDRAULIC FRACTURING 8/21/2018 - 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; 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 8/21/2018 - 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 8/21/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201805737 9/5/2018 - G57 - (I.O.) 6 & 7-14N-9W EST MULTIUNIT HORIZONTAL WELL

X641963 MSNLC, WDFD, HNTN 6-14N-9W X485777 MSSSD, HNTN 7-14N-9W

X582003 WDFD 7-14N-9W

(MSSSD, MSNLC, HNTN ARE ADJACENT COMMON SOURCES OF SUPPLY TO THE WDFD)

50% 6-14N-9W 50% 7-14N-9W

DEVON ENERGY PRODUCTION COMPANY, L.P.

REC 8-14-2018 (THOMAS)

9/5/2018 - G57 - (I.O.) 6 & 7-14N-9W PENDING CD - 201805738

X641963 MSNLC, WDFD, HNTN 6-14N-9W X485777 MSSSD, HNTN 7-14N-9W

X582003 WDFD 7-14N-9W

X165:10-3-28(C)(2)(B) WDFD (ML 6\_7-14N-9W 9HX) MAY BE CLOSER THAN 600' FROM AN

EXISTING WELLBORE & PROPOSED MULTIUNIT HORIZONTAL WELLS COMPL. INT. (6-14N-9W) NCT 150' FNL, NCT 0' FSL, NCT 1320' FEL COMPL. INT. (7-14N-9W) NCT 0' FNL, NCT 150' FSL, NCT 1320' FEL

DEVON ENERGY PRODUCTION COMPANY, L.P.

REC 8-14-2018 (THOMAS)

PENDING CD - 201805743 9/5/2018 - G57 - 6-14N-9W

X641963 WDFD 3 WELLS

DEVON ENERGY PRODUCTION COMPANY, L.P.

REC 8-14-2018 (THOMAS)

PENDING CD - 201805744 9/5/2018 - G57 - 7-14N-9W

X582003 WDFD

4 WELLS DEVON ENERGY PRODUCTION COMPANY, L.P.

REC 8-14-2018 (THOMAS)

**SPACING - 485777** 9/5/2018 - G57 - (640) 7-14N-9W

EXT 442327/197693 MSSSD, HNTN, OTHERS

9/5/2018 - G57 - (640) 7-14N-9W **SPACING - 582003** 

EXT 523760 WDFD

9/5/2018 - G57 - (640)(HOR) 6-14N-9W **SPACING - 641963** 

EST MSNLC, WDFD, HNTN

POE TO BHL (MSNLC, HNTN) NCT 660' FB

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

(COEXIST WITH SP. ORDER 285382 MSSSD, HNTN)

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, L.P. API:017 25276 300 Pointe Parkway Blvd. Yukon, OK 73099 LEASE NAME:ML 6\_7-14N-9W DISTANCE & DIRECTION FROM HWY JCT OR TOWN: 405.787.6270 † 405.787.6276 f WELL NO. 9HX FROM THE TOWN OF CALUMET HEAD NORTH ON CALUMET www.craftontull.com ROAD ±7.5MI TO 234TH ST, HEAD WEST ±4.0MI TO CEDAR GOOD DRILL SITE: YES Crafton Tull ROAD, HEAD NORTH ±0.7MI ON A LEASE ROAD THROUGH CANADIAN COUNTY, STATE:OK A CURVE TO THE RIGHT TO A POINT WHERE A DIRT PATH GROUND ELEVATION: 1477.87' GR. AT STAKE HEADS WEST, HEAD WEST ±0.2MI ON PATH TO WHERE IT SURFACE HOLE FOOTAGE: 2365' FEL - 670' FNL TURNS NORTH, HEAD NORTH ±0.1MI, PAD SITE IS TO THE SECTION: 6 TOWNSHIP: T14N RANGE: R9W NORTH. NORTH.

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

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

QUARTER SECTION DISTANCES MAY BE ASSIMILED 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. BOTTOM HOLE:7-T14N-R9W.I.M. ACCESSIBILITY TO LOCATION: FROM SOUTH LINE TOPOGRAPHY & VEGETATION: N LOCATION FELL IN A FIELD 27) ZONE COUNTY, OKLAHOMA CANADIAN 2365' FEL - 670' FNL SECTION 6 TOWNSHIP 14N RANGE 9W I.M. NORTH (NAD 2) GRID NORT OKLAHOMA -NW COR. FIRST PERFORATION POINT SEC. 6 X=1941209 NE COR. Y=264004 2020' FEL- 165' FNL X=1938618 SEC. 6 X=1943850 Y=263994 ML 6\_7-14N-9W 9HX 2365 2365' FEL - 670' FNL 35° 43' 23.75" NORTH 98° 11' 49.69" WEST X:1941481.6 Y:263332.8 LAT: 35.72326274 LONG:-98,19713677 **SURFACE HOLE DATA** ELEV:1477.87 X=1943838 STATE PLANE COORDINATES: Y=261389 Y=261385 **ZONE:** OK-NORTH NAD27 6 X: 1941481.6 Y: 263332.8 GPS DATUM: NAD27 LAT: 35.72326274 LONG: -98.19713677 STATE PLANE COORDINATES: **ZONE: OK-NORTH NA** SW COR X=1941178 SE COR. SEC. 6 Y=258771 SEC. 6 Y: 263356.5 GPS DATUM: NAD83 X=1943826 X=1938614 Y=258766 LONG: <u>-98.19747519</u> **BOTTOM HOLE DATA** STATE PLANE COORDINATES: ZONE: OK-NORTH NAD27 X: 1941796.8 X=1943821 Y=256129 X=1938609 Y=256136 Y: 253551.2 7 **GPS DATUM: NAD27** LAT: <u>35.69639240</u> LONG: -98.19600843 STATE PLANE COORDINATES: **ZONE**: <u>OK-NORTH NAD83</u> **X**: 1910197.9 LAST PERFORATION POINT 2020' FEL - 165' FSL **Y**: 253575.0 X=1938602 GPS DATUM: NAD83 X=1943817 Y=253513 2020 Y=253492 LAT: 35.69643867 SE COR. LONG: -98.19634615 X=1941210 Y=253504 SW COR. **BOTTOM HOLE** BOTTOM HOLE 2020' FEL - 50' FSL 35° 41' 47.01" NORTH 98° 11' 45.63" WEST X:1941796.8 Y:253551.2 SEC. 7 SEC. 7 20, INFORMATION PROVIDED BY OPERATOR LISTED.

2018.08.13.18:00:00-05:00

ESSIONAZ

DENVER
WINCHESTER

OKTAHOMA

GRAPHIC SCALE IN FEET

LAT: 35.69639240 LONG:-98.19600843

"ML 6_7-14N-9W 9HX"					
PART OF THE NE/4 OF SECTION 6, T-14-N, R-9-W PROPOSED DRILL SITE CANADIAN COUNTY, OKLAHOMA					
 	DRAWN BY	11	SHEET NO :	1 OF 6	
	PART OF THE CANA  SCALE: 1" = 2000'	PART OF THE NE/4 OF SECTION & PROPOSED DRILL SI CANADIAN COUNTY, OKL	PART OF THE NE/4 OF SECTION 6, T-14-N, R-9-W PROPOSED DRILL SITE CANADIAN COUNTY, OKLAHOMA  SCALE: 1" = 2000'	PART OF THE NE/4 OF SECTION 6, T-14-N, R-9-W PROPOSED DRILL SITE CANADIAN COUNTY, OKLAHOMA  SCALE: 1" = 2000'	