API NUMBER: 017 25267

Oil & Gas

Horizontal Hole

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

Approval Date: 09/07/2018
Expiration Date: 03/07/2019

PERMIT TO DRILL

WELL LOCATION: Sec: 06 Twp: 14N Rge: 9W County: CANADIAN

SPOT LOCATION: NW SE NW NW FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: **825 950** 

Lease Name: ML 6\_7-14N-9W Well No: 4HX Well will be 825 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

LARRY GLENN MOORE & CHRISTINE MOORE 118621 234TH ROAD NW

10021 204111 NOAD IVV

CALUMET OK 73014

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

Depth Name Depth MISSISSIPPIAN (LESS CHESTER) 1 10495 6 2 MISSISSIPPIAN SOLID 10495 7 WOODFORD 11138 8 3 HUNTON 11283 9 10 641963 Spacing Orders: Location Exception Orders: Increased Density Orders: 485777

Pending CD Numbers: 201805727 Special Orders:

201805728 201805743 201805744

582003

Total Depth: 20676 Ground Elevation: 1419 Surface Casing: 650 Depth to base of Treatable Water-Bearing FM: 450

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 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

H. SEE MEMO

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

PERMIT NO: 18-35230

## 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: SW SE SW SW
Feet From: SOUTH 1/4 Section Line: 50
Feet From: WEST 1/4 Section Line: 960

Depth of Deviation: 10778 Radius of Turn: 477 Direction: 179

Total Length: 9148

Measured Total Depth: 20676

True Vertical Depth: 11283

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

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

INTERMEDIATE CASING 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 - 201805727 9/4/2018 - 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 - 201805728

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 4HX) MAY BE CLOSER THAN 600' FROM THE

LOOSEN TRUST 2 & PROPOSED MULTIUNIT HORIZONTAL WELLS COMPL. INT. (6-14N-9W) NCT 150' FNL, NCT 0' FSL, NCT 660' FWL COMPL. INT. (7-14N-9W) NCT 0' FNL, NCT 150' FSL, NCT 660' FWL

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** 9/4/2018 - G57 - (640) 7-14N-9W

EXT 442327/197693 MSSSD, HNTN, OTHERS

9/4/2018 - G57 - (640) 7-14N-9W **SPACING - 582003** 

EXT 523760 WDFD

9/4/2018 - 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)

300 Pointe Parkway Blvd. Yukon, OK 73099 405,787,6270 † 405,787,6276 f www.craftontull.com Crafton Tull

N

<del>}</del>

NORTH (NAD 27) DMA - NORTH ZONE

GRID NORT OKLAHOMA -

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, L.P.

LEASE NAME:ML 6\_7-14N-9W WELL NO. 4HX

GOOD DRILL SITE: YES

CANADIAN COUNTY, STATE:OK GROUND ELEVATION: 1419.99' GR. AT STAKE SURFACE HOLE FOOTAGE: 950' FWL - 825' FNL SECTION: 6 TOWNSHIP: T14N RANGE: R9W

BOTTOM HOLE: 7-T14N-R9W.I.M.

ACCESSIBILITY TO LOCATION: FROM WEST LINE TOPOGRAPHY & VEGETATION:

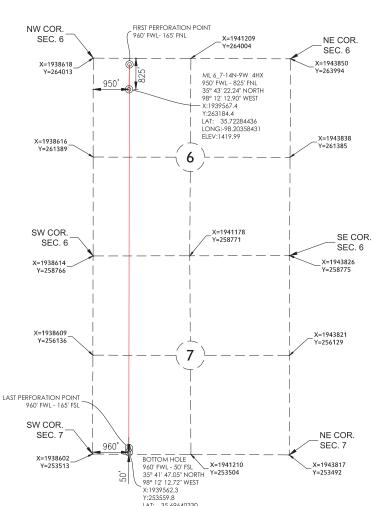
LOCATION FELL IN A FIELD

API:017 25267

DISTANCE & DIRECTION FROM HWY JCT OR TOWN: FROM THE TOWN OF CALUMET HEAD NORTH ON CALUMET ROAD ±7.5MI TO 234TH ST, HEAD WEST ±5.0MI TO MAYBERRY ROAD, HEAD NORTH ±0.9MI TO A LEASE ROAD TO THE EAST, HEAD EAST ±0.2MI, PAD SITE IS TO THE SOUTH.

PLEASE 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 GUIARANTEED. PLEASE CONTACT CRAFTON THU PROMPTLY IF ANY INCONSISTENCY IS DETERMINED, GPS DATA IS OBSERVED FROM RTK-GPS. NOTEX 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 ASSIMILED FROM A GOVERNMENT SURVEY PLAT OR ASSUMED AT A PROPORTIONATE DISTANCE PROM OPPOSING SECTION CORNERS, OR OCCUPATION THEREOF, AND MAY NOT HAVE BEEN MEASURED ON THE GROUND, AND FURTHER. DOES NOT REPRESENT A TRUE BOUNDARY SURVEY.

\_ COUNTY, OKLAHOMA CANADIAN 950' FWL - 825' FNL SECTION 6 TOWNSHIP 14N RANGE 9W I.M.



**SURFACE HOLE DATA** STATE PLANE COORDINATES:

**ZONE**: OK-NORTH NAD27 X: 1939567.4

Y: 263184.4 GPS DATUM: NAD27 LAT: 35.72284436 LONG: -98.20358431

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

**Y**: 263208.2

GPS DATUM: NAD83 LONG: <u>-98.20392299</u>

**BOTTOM HOLE DATA** STATE PLANE COORDINATES: ZONE: OK-NORTH NAD27

X: 1939562.3 Y: 253559.8

GPS DATUM: NAD27 LAT: 35.69640330 LONG: -98.20353358

STATE PLANE COORDINATES: ZONE: OK-NORTH NAD83 x:1907963.3

Y: 253583.6 GPS DATUM: NAD83

LAT: <u>35.69644955</u> LONG: -98.20387177 BOTTOM HOLE INFORMATION PROVIDED BY OPERATOR LISTED.

2018.08.13 16:03:17-05'00' SIONAL DENVER WINCHESTER 1952 OKLAHOMP

	GRA	PHI	C SC	CALE IN FEET	
	**********	*********			
2000	10	00	(	) 20	1

REVISION						
	PART OF THE	de	von			
	SCALE: 1" = 2000' PLOT DATE: 08-13-2018	DRAWN BY:	JJ	SHEET NO.:	1 OF	6

LAT: 35.69640330

LONG:-98.20353358