API NUMBER: 073 25467

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: 12/14/2016
Expiration Date: 06/14/2017

PERMIT TO DRILL

	GFISHER	: KINC	County	je: 5W	N R	wp: 19N	31	Sec:	WELL LOCATION:
FROM WEST	SOUTH	FROM	FEET FROM QUARTER:	W] [SW	SE	SW	SPOT LOCATION:
000	407		SECTION LINES:						

Lease Name: ANDERSON 31-19-5 Well No: 2H Well will be 187 feet from nearest unit or lease boundary.

Operator CHESAPEAKE OPERATING LLC Telephone: 4059353425; 4059358 OTC/OCC Number: 17441 0

CHESAPEAKE OPERATING LLC

PO BOX 18496

OKLAHOMA CITY, OK 73154-0496

ELIZABETH ANDERSON 509 NW 140TH STREET

EDMOND OK 73013

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

	Name	Depth	Name	Depti	1
1	OSWEGO	6070	3		
2		7	•		
3		8	3		
4		9)		
5		•	0		
Spacing Orders:	645042	Location Exception Orders: 658580		Increased Density Orders:	658581

Pending CD Numbers: Special Orders:

Total Depth: 11300 Ground Elevation: 1123 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 160

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is BED AQUIFER
Pit Location Formation: SALT PLAINS

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

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

PERMIT NO: 16-31912

HORIZONTAL HOLE 1

Sec 31 Twp 19N Rge 5W County KINGFISHER

Spot Location of End Point: E2 NW NW NW
Feet From: NORTH 1/4 Section Line: 330
Feet From: WEST 1/4 Section Line: 450

Depth of Deviation: 5816
Radius of Turn: 477
Direction: 356
Total Length: 4735

Measured Total Depth: 11300

True Vertical Depth: 6177

End Point Location from Lease,
Unit. or Property Line: 330

Notes:

Category Description

DEEP SURFACE CASING 12/13/2016 - 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 12/13/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF

HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO

GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

INCREASED DENSITY - 658581 12/14/2016 - G75 - 31-19N-5W

X645042 OSWG

2 WELLS

CHESAPEAKE OP., L.L.C.

12-5-2016

LOCATION EXCEPTION - 658580 12/14/2016 - G75 - (I.O.) 31-19N-5W

X645042 OSWG

COMPL. INT. NCT 330' FSL, NCT 330' FNL, NCT 330' FWL

CHESAPEAKE OP., L.L.C.

12-5-2016

SPACING - 645042 12/14/2016 - G75 - (640)(HOR) 31-19N-5W

VAC OTHER VAC 43828 OSWG

EXT 642334 OSWG, OTHERS POE TO BHL NCT 660' FB

