API NUMBER: 103 24720

Oil & Gas

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

WEST

Approval Date: 09/13/2016 03/13/2017 Expiration Date:

330 feet from nearest unit or lease boundary.

## PERMIT TO DRILL

WELL LOCATION:	Sec:	32	Twp:	21N	Rge:	1W	County	NO	BLE	
SPOT LOCATION:	E2	Sw	S	W	NW		FEET FROM QUARTER:	FROM	SOUTH	FR

SECTION LINES: 330 490

Well No:

HERITAGE PETROLEUM INC Operator OTC/OCC Number: Telephone: 4053772689 19097 0 Name:

HERITAGE PETROLEUM INC

PO BOX 935

Lease Name: WARPAM

Straight Hole

STILLWATER. 74076-0935 OK

LAKE FARM LLC, DARRELL GROOM MGR 9720 SUNNYI ANE ROAD

Well will be

MOORE OK 73160

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

	Name	Depth		Name	Depth
1	PERRY	3375	6	RED FORK	4700
2	LAYTON	3700	7		
3	BIG LIME	4400	8		
4	OSWEGO	4475	9		
5	SKINNER	4650	10		
Spacing Orders:	644390	Location Exception Orders:	648674		Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 5100 Ground Elevation: 0 Surface Casing: 210 Depth to base of Treatable Water-Bearing FM: 160

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

PIT 1 INFORMATION Type of Pit System: ON SITE 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?

located in a Hydrologically Sensitive Area.

Category of Pit: 1A Liner required for Category: 1A Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

A. Evaporation/dewater and backfilling of reserve pit.

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 16-31604

H. 20-MIL PIT LINER REQUIRED

Notes:

Category Description

HYDRAULIC FRACTURING

9/12/2016 - 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.

**LOCATION EXCEPTION - 648674** 9/13/2016 - G60 - (F.O.) NW4 32-21N-1W

X644390 BGLM 330' FSL. 490' FWL NO OP. NAMED

1-15-16

**SPACING** 9/13/2016 - G60 - FORMATIONS UNSPACED; 80-ACRE LEASE (W2 NW4)

**SPACING - 644390** 9/13/2016 - G60 - (160) NW4 32-21-1W

EXT 466600 BGLM

WATERSHED STRUCTURE 9/12/2016 - G71 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION

WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (580)

336-2003 PRIOR TO DRILLING