

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

API NUMBER: 011 24197 A

Approval Date: 03/25/2019

Expiration Date: 09/25/2020

Horizontal Hole Oil & Gas

Amend reason: CHANGE PIT SYSTEM TO CLOSED

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 31 Twp: 19N Rge: 13W

County: BLAINE

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 210 200

Lease Name: PADEN HEIRS

Well No: 4-31MH

Well will be 200 feet from nearest unit or lease boundary.

Operator Name: CRAWLEY PETROLEUM CORPORATION

Telephone: 4052329700

OTC/OCC Number: 7980 0

CRAWLEY PETROLEUM CORPORATION
105 N HUDSON AVE STE 800
OKLAHOMA CITY, OK 73102-4803

DECEASED ALLOTEE NO. 2673 OF THE CHEYENNE
ARAPAHO TRIBE OF INDIANS
PO BOX 68
C/O CONCHO AGENCY - BUREAU OF INDIAN AFFAIRS
EL RENO OK 73036

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN (LESS CHESTER)	9650	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 684704

Location Exception Orders: 692468

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 14307

Ground Elevation: 1715

Surface Casing: 280

Depth to base of Treatable Water-Bearing FM: 230

Under Federal Jurisdiction: Yes

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

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

PERMIT NO: 18-35967

H. SEE MEMO

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.

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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 31 Twp 19N Rge 13W County BLAINE

Spot Location of End Point: SE SW SW SW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 600

Depth of Deviation: 9096

Radius of Turn: 573

Direction: 175

Total Length: 4311

Measured Total Depth: 14307

True Vertical Depth: 9670

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category

Description

HYDRAULIC FRACTURING

2/19/2019 - 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

2/19/2019 - 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

LOCATION EXCEPTION - 692468

3/25/2019 - GA8 - (I.O.) W2 31-19N-13W
X684704 MSNLC
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL
CRAWLEY PETROLEUM CORP.
3/6/2019

MEMO

6/21/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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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.

011 24197 PADEN HEIRS 4-31MH

Category

Description

SPACING - 684704

3/25/2019 - GA8 - (320)(HOR) W2 31-19N-13W
EST MSNLC, OTHER
POE TO BHL NCT 660' FB

This permit does not address the right of entry or settlement of surface damages.

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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.