API NUMBER: 017 25408

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:	03/08/2019
Expiration Date:	09/08/2020

270 feet from nearest unit or lease boundary.

PERMIT TO DRILL

Lease Name: S	SHASTA	1106					We	ell No:	3UMH-28		
							SECTION LINES:		270		2432
SPOT LOCATION:	SE	SE	s	Ε	SW		FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
WELL LOCATION:	Sec:	28	Twp:	11N	Rge:	6W	County	: CAN	ADIAN		

Operator CHAPARRAL ENERGY LLC Telephone: 4054788770; 4054264 OTC/OCC Number: 16896 0

CHAPARRAL ENERGY LLC 701 CEDAR LAKE BLVD

OKLAHOMA CITY, OK 73114-7800

JAMES A. CLARK 9395 S. GREGORY ROAD

Well will be

MUSTANG OK 73064

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	9380	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	674868	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201900478 Special Orders:

201900476

Total Depth: 14220 Ground Elevation: 1302 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 180

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36290

Chlorides Max: 5000 Average: 3000 H. SEE MEMO

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: DUNCAN

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: DUNCAN

HORIZONTAL HOLE 1

Sec 28 Twp 11N Rge 6W County CANADIAN

Spot Location of End Point: NW NE NE NW
Feet From: NORTH 1/4 Section Line: 165
Feet From: WEST 1/4 Section Line: 2145

Depth of Deviation: 8676 Radius of Turn: 382 Direction: 355

Total Length: 4944

Measured Total Depth: 14220

True Vertical Depth: 9420

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

Notes:

MEMO

Category Description

DEEP SURFACE CASING 3/1/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 3/1/2019 - 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

3/1/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201900476 3/8/2019 - GA8 - 28-11N-6W

X674868 MSSP 4 WELLS NO OP. NAMED

REC 2/11/2019 (M. PORTER)

Category Description

3/8/2019 - GA8 - (I.O.) 28-11N-6W PENDING CD - 201900478

X674868 MSSP

X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELLS COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FWL

NO OP. NAMED

REC 2/11/2019 (M. PORTER)

SPACING - 674868 3/8/2019 - GA8 - (640)(HOR) 28-11N-6W

EST MSSP, OTHERS POE TO BHL NCT 660' FB (COEXIST SP. ORDER #231942)

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA 35-017-25408 13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS CANADIAN ____ County, Oklahoma 270'FSL-2432'FWL Section _ ___ Township <u>11N</u> Range <u>6W</u>I.M. -5301'-X 204524 Y 147874 X 2047883 Y 147870 X 2050543 Y 147866 2045242 PROPOSED BOTTOM HOLE 165'FNL-2145'FWL 35'24'204" N 97'50'27.6" W 35 405662408* 97.841001230" X 2047387 147706 EXISTING WELL 1189' W OF DRILL PATH 359,55 28 X 2045246 Y 145238 X 2050538 Y 145229 GRID NAD-27 OK NORTH Scale: 1" = 1000' 0 1000' PROPOSED LANDING POINT 165 FSL - 2145 FWL 35 23 31.5" N 97 50 27.6" W 35 39 20 8 0 0 9 4 N PROPOSED SHASTA 1106 3UMH-28 SHASTA 1106 2LMH-28 97.841006376° W 2047394 142762 X 2047891 Y 142500 2045249 X 2050533 142600 142596 Y 142592 5284 LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED. THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY Operator: CHAPARRAL ENERGY, LLC. **ELEVATION:** Lease Name: SHASTA 1106 Well No.: 3UMH-28 1302' Gr. at Stake Topography & Vegetation ___Loc. fell in open grassland with slight terraces Reference Stakes or Alternate Location Yes Stakes Set None Good Drill Site? _____ Best Accessibility to Location ___ From South off St. Hwy 152 Distance & Direction From the junction of St. Hwy 152 & US Hwy 81 in Union City, Oklahoma, go ±5 miles from Hwy Jct or Town THO THO East on St. Hwy 152 to the Southwest Corner of Section 28. T11N-R6W. Date of Drawing: Feb. 20, 2019 DATUM: NAD-27 Project # <u>124252A</u> Date Staked: <u>Feb. 18, 2019</u> LAT: <u>35°23'32.5"</u> N LONG: 97'50'24.2" W **CERTIFICATE:** LAT: 35.392366090° N CENSED Thomas L. Howell an Oklahoma Licensed Land LONG: 97.840044072' W JURVE

This hered ±1 fo

STATE PLANE COORDINATES (US FEET):

ZONE: OK NORTH X: 2047681 142866

Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

TLAHOMA

Oklahoma Reg. No. _