

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

API NUMBER: 047 25188

Approval Date: 01/31/2019

Expiration Date: 07/31/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 32 Twp: 20N Rge: 6W

County: GARFIELD

SPOT LOCATION: ☐ SW ☐ NW ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 415 2320

Lease Name: BETTY 29

Well No: M5NH

Well will be 415 feet from nearest unit or lease boundary.

Operator Name: SK NEMAHA LLC

Telephone: 7133955141

OTC/OCC Number: 24221 0

SK NEMAHA LLC
11700 KATY FWY STE 900
HOUSTON, TX 77079--1222

MALY FAMILY TRUST
204 E IOWA ST
JOSEPH M MALY TRUSTEE
HENNESSEY OK 73742

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	6784	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 602714

Location Exception Orders:

Increased Density Orders: 689324

Pending CD Numbers: 201809300

Special Orders:

Total Depth: 11857

Ground Elevation: 1142

Surface Casing: 440

Depth to base of Treatable Water-Bearing FM: 390

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: 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: SALT PLAINS

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35985
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 29 Twp 20N Rge 6W County GARFIELD

Spot Location of End Point: NW NE NW NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 1850

Depth of Deviation: 6176

Radius of Turn: 461

Direction: 5

Total Length: 4957

Measured Total Depth: 11857

True Vertical Depth: 6987

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

Notes:

Category

Description

HYDRAULIC FRACTURING

12/29/2018 - 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

INCREASED DENSITY - 689324

1/31/2019 - G58 - 29-20N-6W
X602714 MSSP
1 WELL
SK NEMAHA
1/1/2019

PENDING CD - 201809300

1/31/2019 - G58 - (I.O.) 29-20N-6W
X602714 MSSP
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 1850' FEL
NO OP. NAMED
REC 11/26/2018 (P. PORTER)

SPACING - 602714

1/31/2019 - G58 - (640)(HOR) 29-20N-6W
EST MSSP, OTHERS
POE TO BHL NCT 660' FB
(SUPERSEDE SP. ORDER 63882 MSSLM NW4, SE4, SP. ORDER 46581 MNNG; COEXIST SP. ORDER 63882 MSSLM NE4, SW4)



Well Location Plat

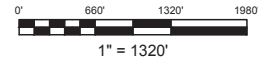
S.H.L. Sec. 32-20N-6W I.M.
B.H.L. Sec. 29-20N-6W I.M.

Operator: SK NEMAHA
Lease Name and No.: BETTY 29-M5NH
Footage: 415' FNL - 2320' FEL Gr. Elevation: 1142'
Section: 32 Township: 20N Range: 6W I.M.
County: Garfield State of Oklahoma
Terrain at Loc.: Location fell in a flat open field.

047-25188



All bearings shown
are grid bearings.



GPS DATUM
NAD 83
NAD 27
OK NORTH ZONE

Surface Hole Loc.:
Lat: 36°10'22.40"N
Lon: 97°51'41.81"W
Lat: 36.17288852
Lon: -97.86161369
X: 2009345
Y: 426982

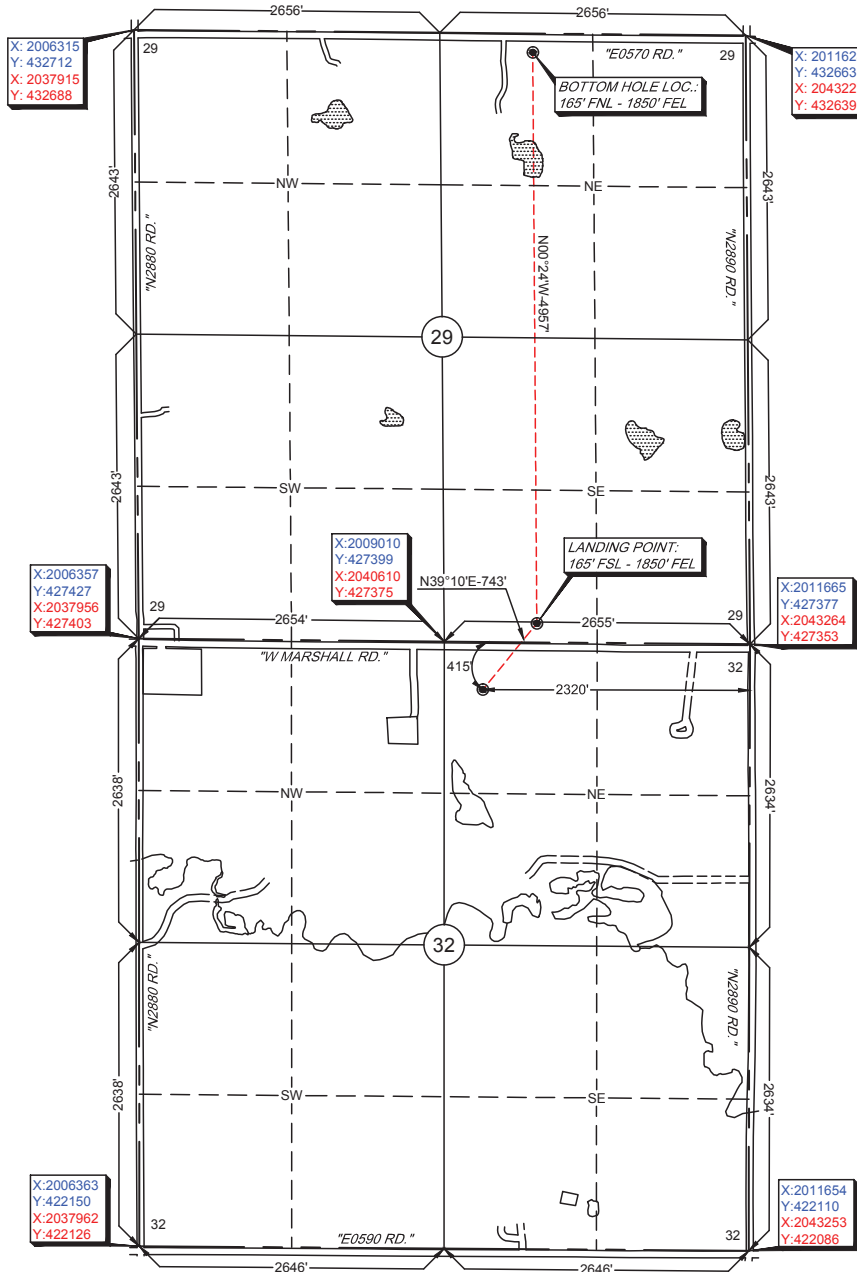
Surface Hole Loc.:
Lat: 36°10'22.27"N
Lon: 97°51'40.61"W
Lat: 36.17285163
Lon: -97.86128001
X: 2040944
Y: 426957

Landing Point:
Lat: 36°10'28.09"N
Lon: 97°51'36.07"W
Lat: 36.17446920
Lon: -97.86002020
X: 2009814
Y: 427558

Landing Point:
Lat: 36°10'27.96"N
Lon: 97°51'34.87"W
Lat: 36.17443233
Lon: -97.85968655
X: 2041414
Y: 427533

Bottom Hole Loc.:
Lat: 36°11'17.12"N
Lon: 97°51'36.42"W
Lat: 36.18808821
Lon: -97.86011628
X: 2009779
Y: 432515

Bottom Hole Loc.:
Lat: 36°11'16.99"N
Lon: 97°51'35.22"W
Lat: 36.18805159
Lon: -97.85978252
X: 2041378
Y: 432491



-Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.
-NOTE: X 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 assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey.

Survey and plat by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2020

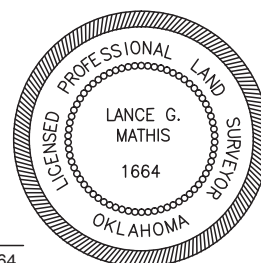
Certification:

This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

Lance G. Mathis
LANCE G. MATHIS

11/29/18

OK LPLS 1664



Invoice #8315-B

Date Staked: 11/20/18 By: D.K.
Date Drawn: 11/26/18 By: E.W.