

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

API NUMBER: 125 23916

Approval Date: 10/19/2016
Expiration Date: 04/19/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 9N Rge: 5E

County: POTTAWATOMIE

SPOT LOCATION: SE SW SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 225 540

Lease Name: SOUTH HOTULKE UNIT

Well No: 27-2

Well will be 540 feet from nearest unit or lease boundary.

Operator Name: TCINA INC

Telephone: 4053820399

OTC/OCC Number: 11432 0

TCINA INC
PO BOX 470
SEMINOLE, OK 74818-0470

WANDA HIXON
48075 RUBEN RIVERS RD.
EARLSBORO OK 74840

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

Name	Depth	Name	Depth
1 HUNTON	4200	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 313834

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 6603

Ground Elevation: 910

Surface Casing: 730

Depth to base of Treatable Water-Bearing FM: 680

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

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

E. Haul to Commercial pit facility: Sec. 19 Twn. 8N Rng. 5E Cnty. 125 Order No: 274874

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 30 Twp 9N Rge 5E County POTTAWATOMIE

Spot Location of End Point: SE SW SW NW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 540

Depth of Deviation: 3300

Radius of Turn: 900

Direction: 180

Total Length: 1889

Measured Total Depth: 6603

True Vertical Depth: 4200

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

Notes:

Category

Description

BOTTOM-HOLE LOCATION

10/19/2016 - G75 - 165' FSL, 540' FWL NW4 30-9N-5E PER OPERATOR

HYDRAULIC FRACTURING

10/6/2016 - 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/](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.

SPACING - 313834

10/6/2016 - G75 - (UNIT) SW4 19 & NW4 30-9N-5E EST SOUTH HOTULKE UNIT FOR HNTN

BOUNDARY SURVEY

CERTIFICATE OF SURVEY:
 DATE OF SURVEY OCTOBER 18, 2016. I, CHRIS D'AMICO, LICENSED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY AS OF THE DATE SET FORTH ABOVE, THAT A CAREFUL SURVEY OF A TRACT OF LAND AS DESCRIBED BELOW WAS PREPARED UNDER MY DIRECT SUPERVISION, AND THIS PLAT OF SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

BASIS OF BEARING N89°21'49"E ALONG THE NORTH LINE OF SECTION 30 USING OKLAHOMA SOUTH STATE PLANE COORDINATE SYSTEM, ZONE 3501, NAD 83.

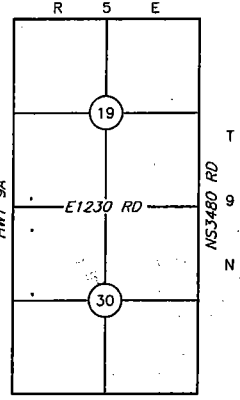
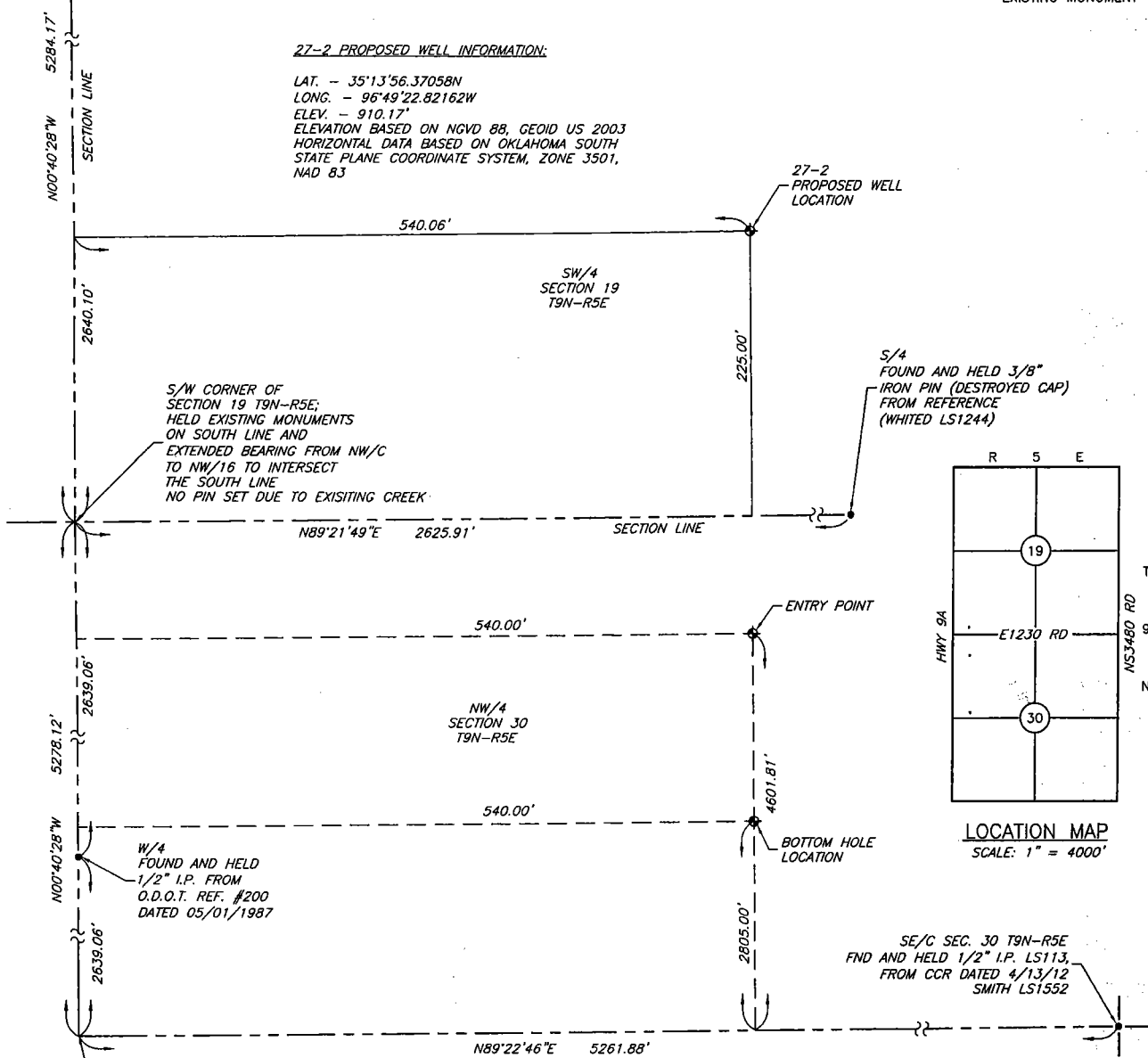
SCALE:
 1" = 100'

LEGEND
 (o) INDICATES 3/8" IRON PIN, SET W/CAP "CA 2260"
 (•) INDICATES EXISTING MONUMENT

NW/4 SECTION 19
 T9N-R5E
 FOUND AND HELD 3/8" IRON PIN FROM REFERENCE (WHITED LS1298)
 NW/16
 FOUND AND HELD MAG NAIL (WHITED LS1298)
 W/4, SECTION 19
 T9N-R5E
 W/4 CALCULATED BY SINGLE PROPORTIONATE MEASUREMENT USING ODOT DISTANCE PROVIDED ON WHITED (LS 1298) NW/16 CCR NO PIN SET DUE TO EXISTING CREEK.

27-2 PROPOSED WELL INFORMATION:

LAT. - 35°13'56.37058N
 LONG. - 96°49'22.82162W
 ELEV. - 910.17'
 ELEVATION BASED ON NGVD 88, GEOID US 2003
 HORIZONTAL DATA BASED ON OKLAHOMA SOUTH STATE PLANE COORDINATE SYSTEM, ZONE 3501, NAD 83



SE/C SEC. 30 T9N-R5E
 FND AND HELD 1/2" I.P. LS113,
 FROM CCR DATED 4/13/12
 SMITH LS1552

S/W CORNER OF SECTION 30 T9N-R5E; CALCULATED CORNER USING O.D.O.T. FIELD BOOK DATA S.W.O. 2141-(1), COULD NOT SET DUE TO THE LOCATION FALLING IN THE LITTLE RIVER

IF THE SURVEYOR'S SEAL IMPRESSION IS NOT RED COLORED, THE PLAT IS A COPY.

GENERAL NOTES:
 A TITLE COMMITMENT, INDICATING APPLICABLE EASEMENTS, HAS NOT BEEN PROVIDED. THEREFORE ALL EASEMENTS MAY NOT BE SHOWN HEREON.

Chris D'Amico
 Chris D'Amico, E.S.
 1945
 Date



LANDES ENGINEERING L.L.C. & ASSOCIATES 903 EAST 35TH STREET, SHAWNEE, OK. 74804 405-275-5388 CA #2260 EXP. 6-30-17 www.landesengineering.net		BERRY DOYAL, TCINA INC. SEMINOLE, OKLAHOMA	
DATE DRAFTED: 10-18-2016	DATE OF LAST SITE VISIT: 10-14-2016	DRAWN BY: dl	DRAWING NUMBER: 7330-B
		CHECKED: CD	