API NUMBER: 043 23668

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: 11/20/2018
Expiration Date: 05/20/2020

23467 0

Well will be 300 feet from nearest unit or lease boundary.

OTC/OCC Number:

PERMIT TO DRILL

WELL LOCATION	Sec:	28	Twp:	19N	Rae.	17V	V Co	ounty	: DEW	/FY		
WELL LOOKINGIN			- wp.		rtgo.			Juilty	. DLV			
SPOT LOCATION	SE	SW	SE		SE		FEET FROM QUART	ER:	FROM	SOUTH	FROM	EAST
							SECTION LINES:			300		695
Lease Name:	BROCK 2	8-19-1	17					We	ell No:	1H		
Operator Name:	TAPS	TONE	ENER	GY LLO	С					Teleph	none:	4057021600

RUSSELL CARTER & DAVA CARTER

59095 US HWY. 183

Approved Method for disposal of Drilling Fluids:

H. SEE MEMO

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

SEILING OK 73663

Special Orders:

TAPSTONE ENERGY LLC 100 E MAIN ST

OKLAHOMA CITY. OK 73104-2509

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

1 MISSISSIPPIAN 12000 6	
2 7	
3 8	
4 9	
5 10	
Spacing Orders: 666118 Location Exception Orders: Increased Density Orders:	

Pending CD Numbers: 201808875

201808874

Total Depth: 16500 Ground Elevation: 1924 Surface Casing: 420 Depth to base of Treatable Water-Bearing FM: 270

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

PIT 1 INFORMATION

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

PERMIT NO: 18-35761

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 28 Twp 19N Rge 17W County **DEWEY** NE Spot Location of End Point: ΝE NW NF Feet From: NORTH 1/4 Section Line: 165 Feet From: EAST 1/4 Section Line: 695

Depth of Deviation: 11396 Radius of Turn: 477 Direction: 360

Total Length: 4355

Measured Total Depth: 16500

True Vertical Depth: 12000

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

Notes:

Category Description

HYDRAULIC FRACTURING 11/9/2018 - 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

INTERMEDIATE CASING 11/9/2018 - 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

MEMO 11/9/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 -

OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201808874 11/13/2018 - G75 - 28-19N-17W

X666118 MSSP 2 WELLS NO OP. NAMED

REC 11-20-2018 (FOREMAN)

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.

Category Description

PENDING CD - 201808875 11/13/2018 - G75 - (E.O.) 28-19N-17W

X666118 MSSP

COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 330' FEL

TAPSTONE ENERGY, LLC REC 11-20-2018 (MINMIER)

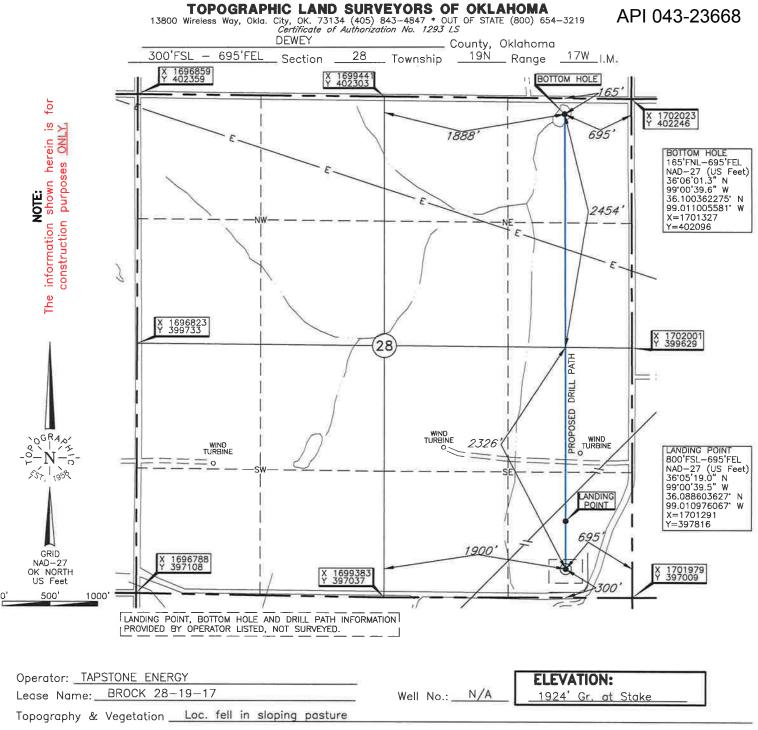
SPACING - 666118 11/13/2018 - G75 - (640)(HOR) 28-19N-17W

VAC 78413 MCSTR

VAC 217107 MSSLM, OTHER

EST OTHER

EXT 658913 MSSP, OTHER POE TO BHL NCT 660' FB



Reference Stakes or Alternate Location Yes None Good Drill Site? _____ Stakes Set Best Accessibility to Location From South off county road Distance & Direction From Jct. US Hwy. 183 N-S and St. Hwy. 51 E-W, West of Seiling, OK, go ±3.0 mi. West from Hwy Jct or Town_ on St. Hwy. 51, then ±4.0 mi. South to the approximate SE Cor. of Sec. 28-T19N-R17W

NAD-27 LAT: 36'05'14.0"N LONG: 99'00'39.5"W a information we with a GPS of toot Horiz./Vert. LAT: 36.087230059° N LONG: 99.010972620' W STATE PLANE COORDINATES: (US Feet) ZONE: OK NORTH X:___1701287 397316

Revision X A

Date of Drawing: Oct. 25, 2018

Invoice # 304729 Date Staked: Oct. 22, 2018

CERTIFICATE:

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

Thoma I. Nave Oklahoma Lic. No. _



APPLICATION TO DRILL, RECOMPLETE OR REENTER

FORM 1000 REV. 2018 Page 1 of 2

•
FE ORIGINAL ONLY
PLEASE TYPE OR USE BLACK INK
1. OTC/OCC OPERATOR NUMBER
23467
2. API NUMBER
3. NOTICE OF INTENT TO:
X DRILL RECOMPLETE

NOTE: Annotate one of the fee options on Page 2.

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



2. APINOMBER	Page 2.		: 165:10-3-1)	EVEEDL	rfn
3. NOTICE OF INTENT TO:	(CHECK ONLY ONE)			and the same of	
X DRILL RECOMPLETE NOTE: ATTACH COP	REENTER DEE Y OF 1002-A IF RECOMPLETION		D-REASON	6. LOCATE WEL	LAND OUTLINE
4. TYPE OF DRILLING OPERATION >>>	>>>> (NOTE: If direct	ctional or horizontal, see	e reverse side for bottom hole loca	tion) LEASE OR SPAC	ING UNIT IN INK
A. STRAIGHT HOLE B. X OIL/GAS INJECTION		HORIZONTAL HOLE TER SUPPLY S	MULTI TEMPOR TRAT TEST SERVICE WEI		ow +
	VIOI OUNEVVA	TEROGRAFI	TION TEUT OLIVIOL WE	2310	
5. WELL LOCATION: SECTION 28 TOWNSHIP 19	N RANGE 17W	COUNTY	DEWEY	1650	
SPOT LOCATION:	FEET FRO	OM NORTH SOUTH		990	
	1/4 SE 1/4 1/4 - SECT		above) (dircle one option above)		
O LEACE MANE.	earest unit / property boundary.	300	= feet 695 ← feet	330	Û
BI	ROCK 28-19-17		111	2310	
OF LIVATOR.	E ENERGY	EMAIL	ADDRESS:	1650	
ADDRESS PO	BOX 1608	PHONE (AC/NUMBER	₹)	990	
OKLAHOMA	CITY	OK z	73101-1608	330	
10. SURFACE OWNER (ONE ONLY, ATTACH SHEET	FOR ADDITIONAL OWNERS)	D 11 O		1980 1320 660	2640 1980
		Russell Carte	r and Dava Carter		, , , ,
ADDRESS	59095 L	JS Hwy 183		11. Well located on lands under fed	leral jurisdiction?
CITY Seiling	STATE		P CODE 73663	Y X N 12. Will a water well be drilled	Y X N
Seiling		UK .	7 3003	Will surface water be used: X 13. Spud Date	Y N
14. LIST TARGET FORMATIONS AND DEP	THS OF EACH BELOW (LIMITED	TO TEN)	TEMBADADY	AUTHORIZATI	กบ
1) MISSISSIPPIAN - 1200		6)	TEMPUNANI	AUINONIZATI	DIN T
2)	<u> </u>	7)	T() DRILL	
		7)			
3)		8)		1-20-2018	
4)		9)	Expiration Date:	- 11 000	
5)		10)	Signature: 1/1/9/10	a thellings	
15. SPACING ORDER NUMBER(S)			NSPACED OAC	165: 10,3,1 _e (L)	
AND SIZE UNIT(S): 16. PENDING APPLICATION C.D. NO.	666118 -	-640		OUTLINE_	
201808875 (LE), 201808874 (II		11-20-2018	8. INCREASED DENSITY ORDER N/A		
19. TOTAL DEPTH 20. GROUND ELEV. 16500 1924	21. BASE OF TREATABLE WATE 270	ÉR 22. SURFACE CA 420	SING 23. ALT CASING PROGU Y N	SED?	
24. ALTERNATIVE CASING PROCEDURE,	check box and fill in blank (AFFIDA total depth to ground surface on th				
B. Cement will be circulated from	depth to	depth	by use of a two stage cementing tool.		
25.1. PIT INFORMATION: Using more than a A. TYPE OF MUD SYSTEM:	one pit or mud system? X WATER BASED		f yes, fill out line 25.2 on top reverse s BAS BASED (AIR DRILL)	side.	
B. EXPECTED MUD CHLORIDE PIT #1 C. TYPE OF PIT SYSTEM:	CONTENT: maximum:	8000	pm; average; 5000	ppm.	
D. IS DEPTH TO TOP OF GROU	on-site off-s UND WATER GREATER THAN 10				
E. WITHIN 1 MILE OF MUNICIPAF. WELLHEAD PROTECTION A		N X N		Off-Site Pit No.	
26.1 A. CATEGORY	1A 1B 2 3 4 C		Office 115	Non-U.S.A. Em. Otros	J. Combine
OCC USE ONLY B. PIT LOCATION: C. Special area or fiel			Bedrock AquiferOther H.S D. DEEP SCA?YY		The springs
F. SOIL COMPACTED 27. PROPOSED METHOD FOR DISPOSAL	OF DRILLING FLUIDS (MUST BE		3. 20 mil GEOMEMBRANE LINER R	EQUIRED? Y X N	
A. Evaporation/dewater and back		L COM LLILD,			
	PERMIT and surface casing set 2	200 feet below base of tre	atable water-bearing formation.)	PERMIT NO	
D. One time land application — E. Haul to Commercial pit facility.		PERMIT NO)18-35761	Order No.	
F. Haul to Commercial soil farming	ng facility; Specify site:			Order No.	
G. Haul to recycling/re-use facilit H. Other, Specify:	y, opening site:	tem = Stee	1 pHS per opera	Order No.	42-0BM+0
		this two page appli	cation prepared by me or ur	nder my supervision.	dor, orn cuttings
			complete to the best of my ki	nowledge and belief. 🏻 🏲	r District
SIGNUTURA SHOULD	NAME (Prin	nt or Type) Shannon Sh	PHONE (A	C/NO.) FAX (AC/NO.) .702.5463	11/02/18
			TICE:		

NOTICE: Approval is void if operations have not commenced within eighteen months of the date of approval. An approved permit must be posted at the location during drilling and completion operations.

File the Form 1001A, Spud Report, within fourteen days of commencement of operations.

(Take to the Cashier on the First Floor) 2101 N. Lincoln Blvd.

Oklahoma City, OK 73105

Attention: Central Processing

P.O. Box 52000 Oklahoma City, OK 73152-2000