API NUMBER: 003 23316

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: 05/11/2018
Expiration Date: 11/11/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	01	Twp:	24N	Rge:	12W	County:	ALFALFA
----------------	------	----	------	-----	------	-----	---------	---------

SPOT LOCATION: NE NW NW NW FEET FROM QUARTER: FROM NORTH FROM WEST SECTION LINES: 156 610

Lease Name: LOIS 2512 Well No: 2 36-25XH Well will be 156 feet from nearest unit or lease boundary.

Operator Name: Telephone: 9189478550 OTC/OCC Number: 23079 0

MIDSTATES PETROLEUM CO LLC 321 S BOSTON AVE STE 1000

TULSA, OK 74103-3322

NEAL HOFFMAN, POA FOR LOIS KASSIK

503 MYERS DRIVE

ALVA OK 73717

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	6000	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 601248 Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201802964 Special Orders:

Total Depth: 16620 Ground Elevation: 1357 Surface Casing: 340 Depth to base of Treatable Water-Bearing FM: 290

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

Approved Method for disposal of Drilling Fluids:

E. Haul to Commercial pit facility: Sec. 10 Twn. 26N Rng. 15W Cnty. 151 Order No: 563714

H. SEE MEMO

#### PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED
Chlorides Max: 25000 Average: 8000

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: FLOWERPOT

#### 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?

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: FLOWERPOT

### **HORIZONTAL HOLE 1**

Sec 25 Twp 25N Rge 12W County ALFALFA

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

Feet From: EAST 1/4 Section Line: 1919

Depth of Deviation: 5625 Radius of Turn: 869

Direction: 15

Total Length: 9630

Measured Total Depth: 16620 True Vertical Depth: 6254

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

Notes:

Category Description

HYDRAULIC FRACTURING 4/18/2018 - 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

MEMO 4/18/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201802615 4/23/2018 - G58 - (640)(HOR) 36-25N-12W

VAC 105348 MNNG EXT 601248 MSSP COMPL. INT. NLT 660' FB

(COEXIST SP. ORDER 192790 MISS)

**REC 5/1/2018 (JOHNSON)** 

PENDING CD - 201802964 4/23/2018 - G58 - (I.O.) 25-25N-12W

X165:10-3-28(C)(2)(B) MSSP (LOIS 2512 2 36-25XH) NO CLOSER THAN 200 FEET FROM THE KOST 1-25 WELL

**REC 5/1/2018 (JOHNSON)** 

PENDING CD - 201802965 4/23/2018 - G58 - (I.O.) 36-25N-12W

X165:10-3-28(C)(2)(B) MSSP (LOIS 2512 2 36-25XH) NO CLOSER THAN 200 FEET FROM THE OK E 1-36 WELL

REC 5/1/2018 (JOHNSON)

PENDING CD - 201802966 4/23/2018 - G58 - 25-25N-12W

X601248 MSSP 1 WELL

NO OP. NAMED

REC 5/1/2018 (JOHNSON)

PENDING CD - 201802967 4/23/2018 - G58 - 36-25N-12W

X201802615 MSSP

1 WELL

NO OP. NAMED

**REC 5/1/2018 (JOHNSON)** 

PENDING CD - 201802968 4/23/2018 - G58 - (I.O.) 25 & 36-25N-12W

EST MULTIUNIT HORIZONTAL WELL X601248 MSSP (25-25N-12W) X201802615 MSSP (36-25N-12W)

53% 25-25N-12W 47% 36-25N-12W NO OP. NAMED

REC 5/1/2018 (JOHNSON)

PENDING CD - 201802969 4/23/2018 - G58 - (I.O.) 25 & 36-25N-12W

X601248 MSSP (25-25N-12W) X201802615 MSSP (36-25N-12W)

COMPL. INT. (25-25N-12W) NCT 165' FNL, NCT 0' FSL, NCT 990' FEL COMPL. INT. (36-25N-12W) NCT 0' FNL, NCT 165' FSL, NCT 990' FEL

NO OP. NAMÈD

**REC 5/1/2018 (JOHNSON)** 

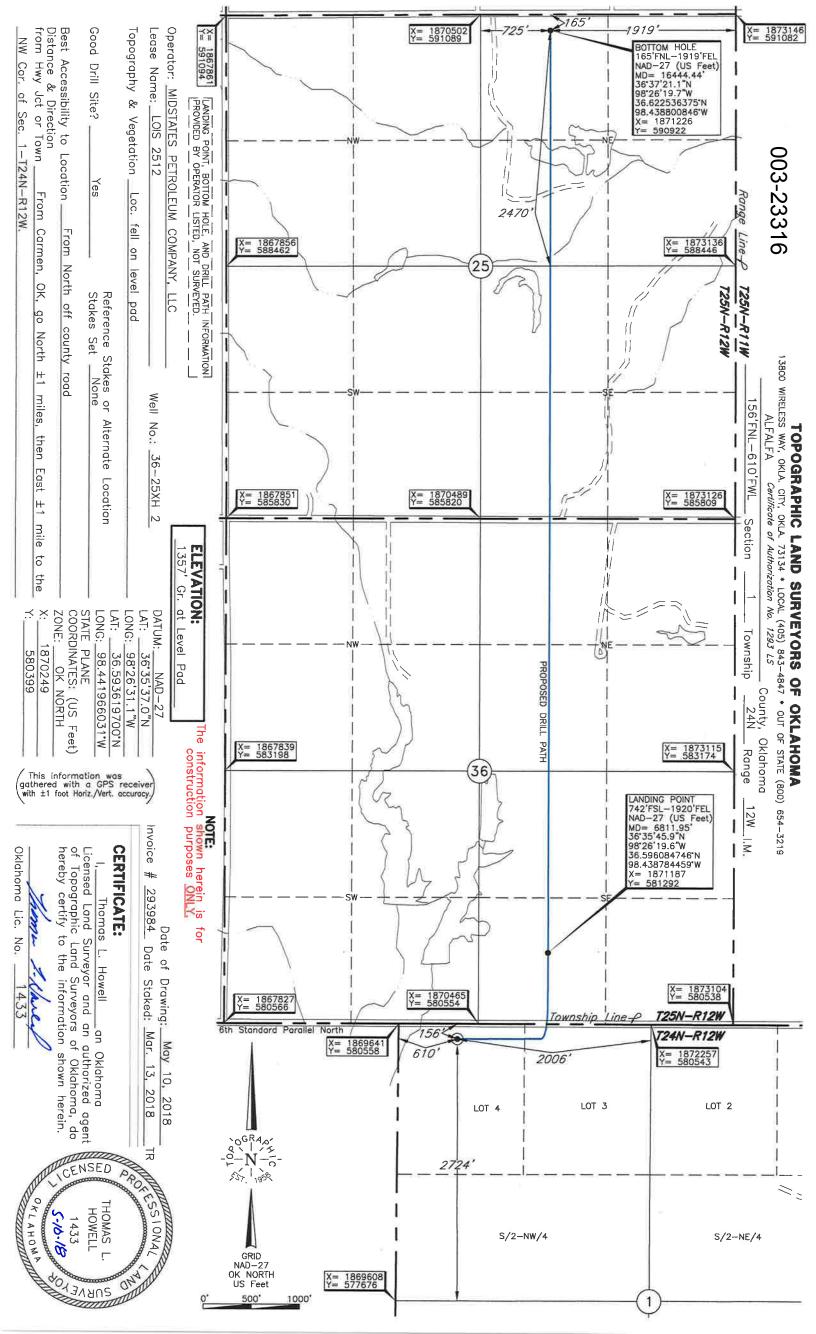
SPACING - 601248 4/23/2018 - G58 - (640)(HOR) 25-25N-12W

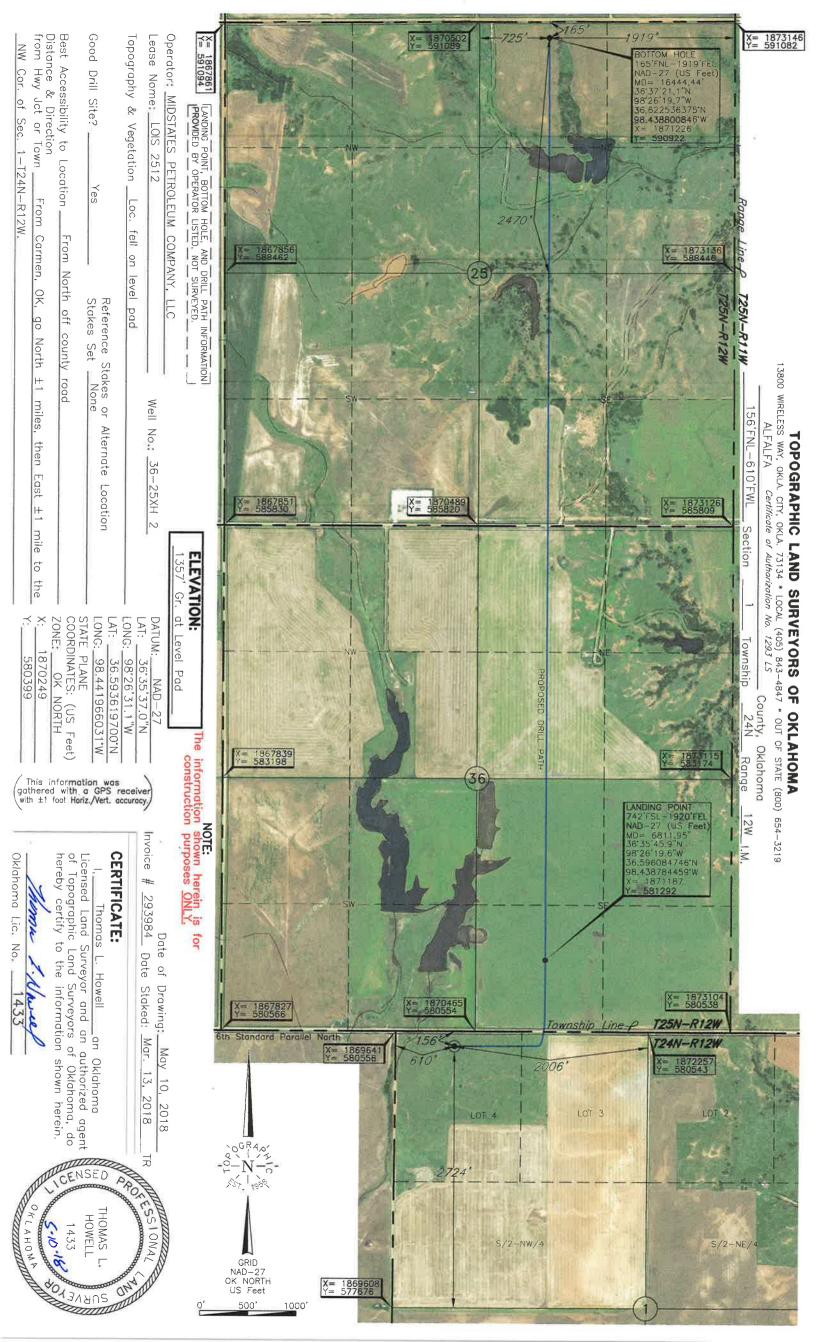
EST MSSP

COMPL. INT. NCT 660' FB

(SUPERSEDE NON-PRODUCING, NON-HORIZONTAL SPACING UNITS; COEXIST WITH

PRODUCING, NON-HORIZONTAL SPACING UNITS)

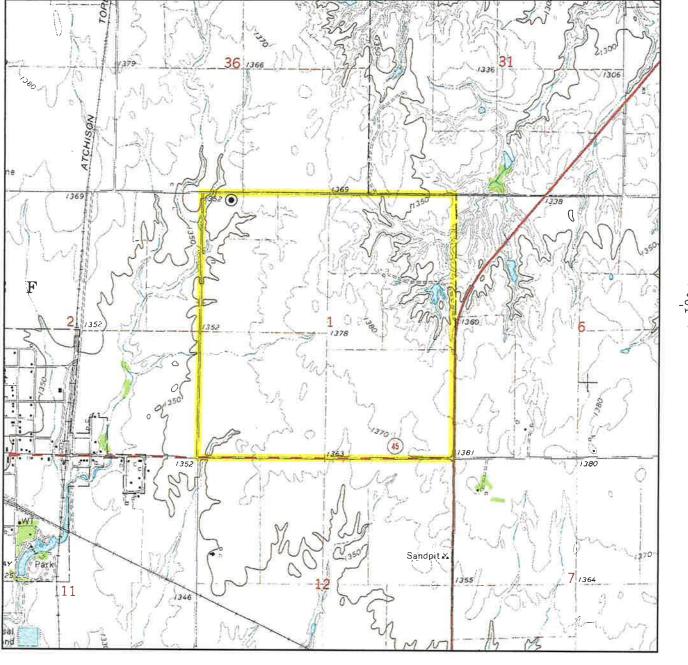




# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry 13800 Wireless Way, Oklahoma City, OK 73134 www.topographic.com Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

## LOCATION & ELEVATION VERIFICATION MAP



Sec1_	Twp24N	Rng	12W	_IM
County	ALFALFA	State	OK	
Operator_N	MIDSTATES PETROLE	UM COM	IPANY, LLC	-0.
Description	156'FNL-610'FW	<u></u>		_
Lease	LOIS 2512 36-2	25XH 2		
TICOCT	1357' Gr. at Le			-

Above Background Data from U.S.G.S. Topographic Map Scale: 1"=2000'

Contour Interval 10'

When elevation is shown hereon it is the ground elevation of the location stake. Review this plat and inform us immediately of any possible discrepancy.

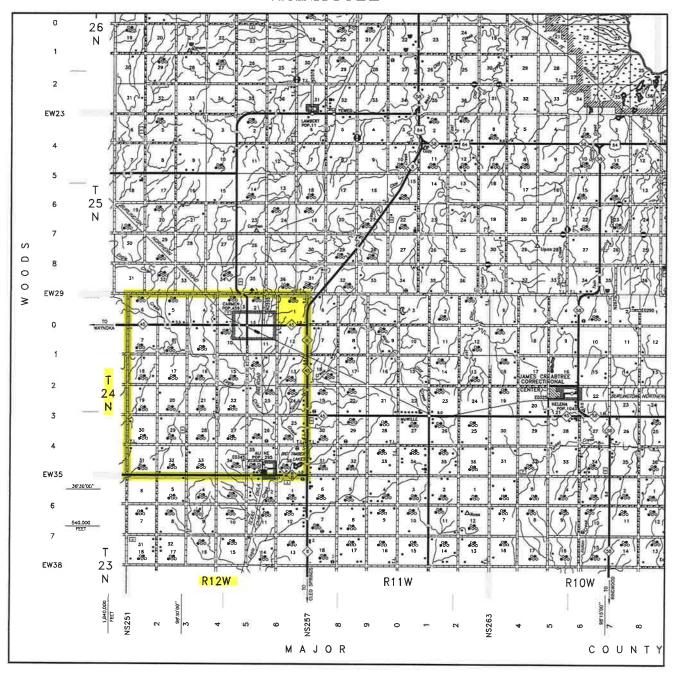


Mar. 13, 2018

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## **VICINITY MAP**



Scale: 1'' = 3 Miles

557 1958

 Sec.
 1
 Twp.
 24N
 Rng.
 12W
 IM

 County
 ALFALFA
 State
 OK

LAND SURVEYORS OF OKLAHOMA

Operator MIDSTATES PETROLEUM COMPANY, LLC