

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

API NUMBER: 003 23344

Approval Date: 10/24/2018
Expiration Date: 04/24/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 17 Twp: 24N Rge: 12W County: ALFALFA
SPOT LOCATION: NW SW SW SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 600 2400

Lease Name: MAHIEU 2412 Well No: 1-20-29XH A Well will be 600 feet from nearest unit or lease boundary.

Operator Name: MIDSTATES PETROLEUM CO LLC Telephone: 9189478550 OTC/OCC Number: 23079 0

MIDSTATES PETROLEUM CO LLC
321 S BOSTON AVE STE 1000
TULSA, OK 74103-3322

MATT MAHIEU
612 EAST 8TH STREET
CHEROKEE OK 73728

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

	Name	Depth	Name	Depth
1	MISSISSIPPI	6438	6	
2	MISSISSIPPIAN	6500	7	
3			8	
4			9	
5			10	

Spacing Orders: 94438

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201806957
201806958
201806959
201806581

Special Orders:

Total Depth: 17471 Ground Elevation: 1348 **Surface Casing: 1300** Depth to base of Treatable Water-Bearing FM: 530

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

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

Is depth to top of ground water greater than 10ft below base of pit? Y

H. SEE MEMO

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

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.

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 29 Twp 24N Rge 12W County ALFALFA

Spot Location of End Point: S2 S2 SW SW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 6100

Radius of Turn: 817

Direction: 190

Total Length: 10087

Measured Total Depth: 17471

True Vertical Depth: 6619

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

Notes:

Category

Description

DEEP SURFACE CASING

9/7/2018 - GA3 - 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

9/6/2018 - GA3 - 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

PENDING CD - 201806581

9/7/2018 - G58 - (640)(HOR) 29-24N-12W
VAC 106519 MISS, MNNG, N2
VAC OTHER
EST MSSP, OTHERS
COMPL. INT. NLT 660' FB
(COEXIST SP. ORDER 120330 MISS, MNNG)
REC 9/11/2018 (DUNN)

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 - 201806957	9/7/2018 - G58 - (E.O.) 20 & 29-24N-12W EST MULTIUNIT HORIZONTAL WELL X94438 MISS, OTHER X201806581 MSSP 47% 20-24N-12W 53% 29-24N-12W NO OP. NAMED REC 9/25/2018 (DUNN)
PENDING CD - 201806958	9/7/2018 - G58 - (E.O.) 20 & 29-24N-12W X94438 MISS, OTHER X201806581 MSSP COMPL. INT. 20-24N-12W NCT 165' FNL, NCT 0' FSL, NCT 600' FWL COMPL. INT. 29-24N-12W NCT 0' FNL, NCT 165' FSL, NCT 600' FWL NO OP. NAMED REC 9/25/2018 (DUNN)
PENDING CD - 201806959	9/7/2018 - G58 - 20-24N-12W X94438 MISS, OTHER 1 WELL NO OP. NAMED REC 9/25/2018 (DUNN)
PITS	9/6/2018 - GA3 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR OPTION, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DEQ REGULATED FACILITY, COMMERCIAL PIT #563714, 10-26N-15W, WOODS CO
SPACING - 94438	9/7/2018 - G58 - (640) 20-24N-12W EST MISS, OTHERS

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.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

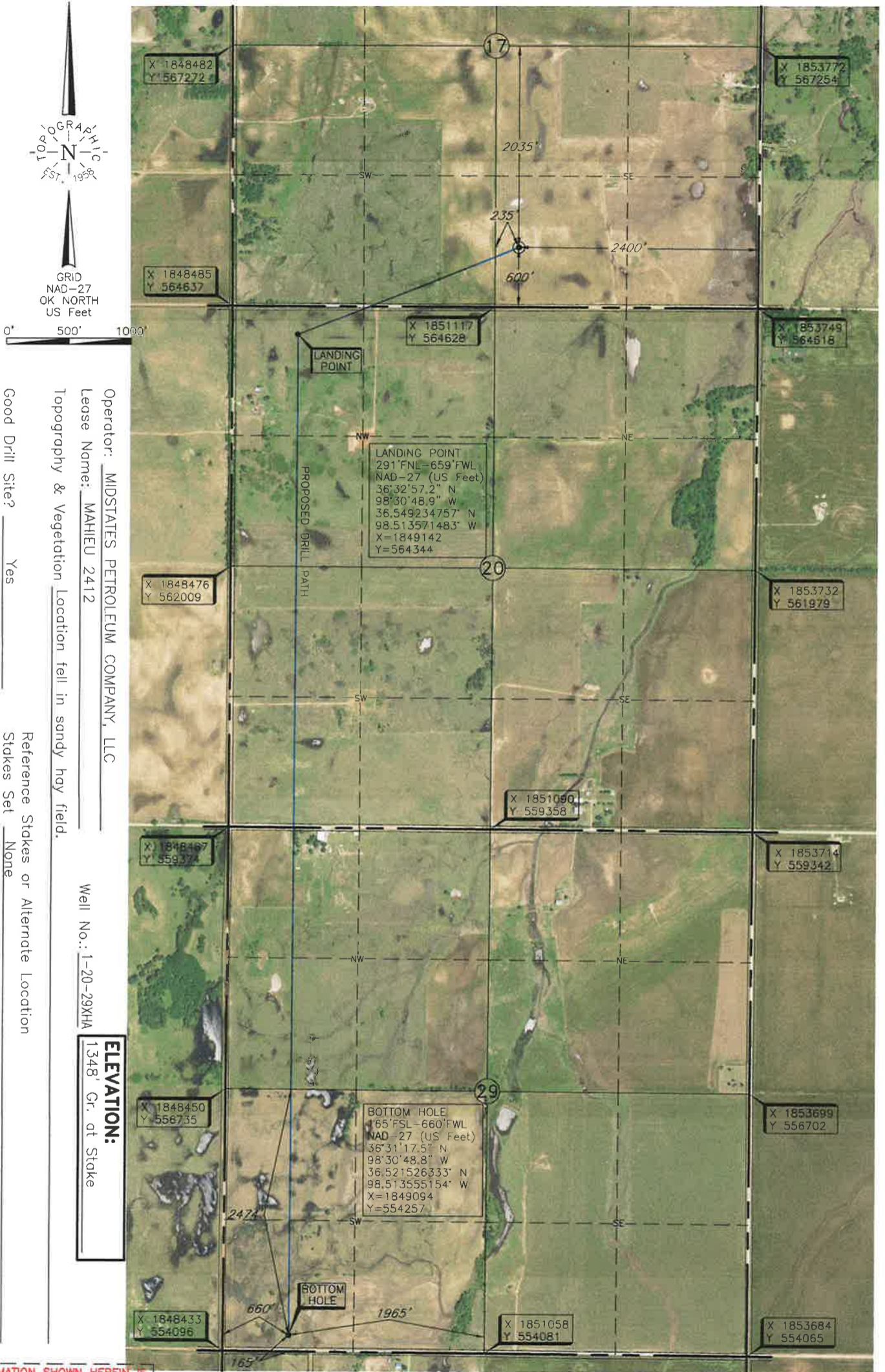
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134* LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
 Certificate of Authorization No. 1293 LS

003-23344

ALFALFA

County, Oklahoma

600'FSL - 2400'FEL Section 17 Township 24N Range 12W I.M.



LANDING POINT
 291'FNL-659'FWL
 NAD-27 (US Feet)
 36°32'57.2" N
 98°30'48.9" W
 36,549234757" N
 98,513571483" W
 X=1849142
 Y=564344

BOTTOM HOLE
 165'FSL-660'FWL
 NAD-27 (US Feet)
 36°31'17.5" N
 98°30'48.8" W
 36,521526333" N
 98,513555154" W
 X=1849094
 Y=554257

Operator: MIDSTATES PETROLEUM COMPANY, LLC
 Lease Name: MAHIEU 2412
 Topography & Vegetation: Location fell in sandy hay field.
 Well No.: 1-20-29XHA
ELEVATION:
1348' Gr. at Stake

Good Drill Site? Yes
 Reference Stakes or Alternate Location: Stakes Set None
 Best Accessibility to Location: From county road south of well location.
 Distance & Direction: From Hwy Jct or Town
 Corner of Section 17, T24N-R12W.

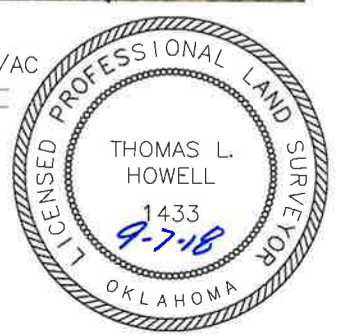
[LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.]

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

DATUM: NAD-27
 LAT: 36°33'06.1" N
 LONG: 98°30'21.8" W
 STATE PLANE COORDINATES (US FEET):
 ZONE: OK NORTH
 X: 1851354
 Y: 565227

Invoice # 302504 Date of Drawing: Sep. 07, 2018
 Date Staked: July 18, 2018 JGW/AC

CERTIFICATE:
 I, 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.
Thomas L. Howell
 Oklahoma Lic. No. 1433



This information was gathered with a GPS receiver with 1 ft vertical accuracy.

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

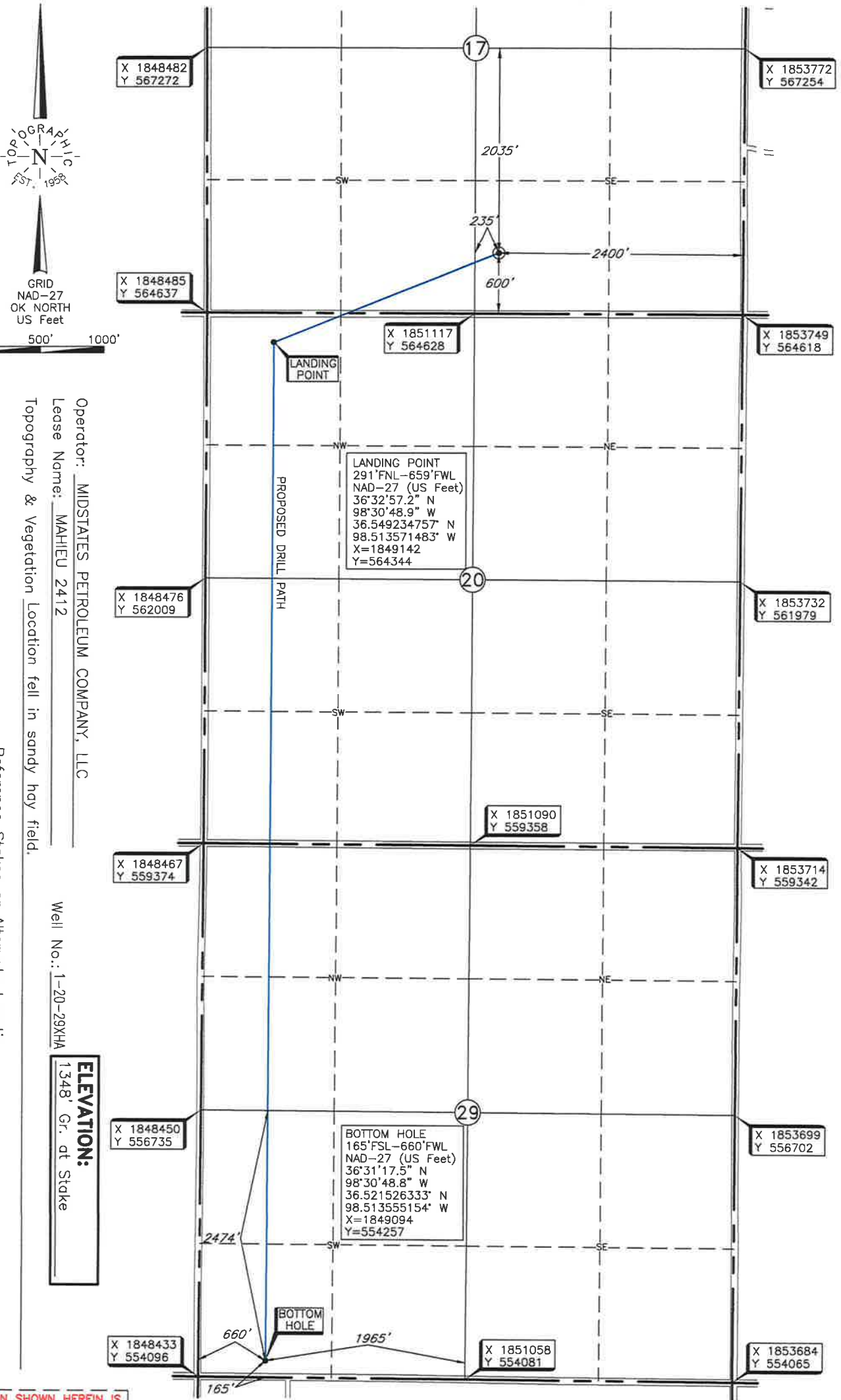
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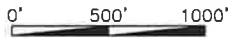
County, Oklahoma

003-23344

600'FSL - 2400'FEL Section 17 Township 24N Range 12W I.M.



GRID
 NAD-27
 OK NORTH
 US Feet



LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

Operator: MIDSTATES PETROLEUM COMPANY, LLC
 Lease Name: MAHEU 2412
 Topography & Vegetation Location fell in sandy hay field.
 Well No.: 1-20-29XHA
 ELEVATION: 1348' Gr. at Stake

Good Drill Site? Yes No
 Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From county road south of well location.
 Distance & Direction From Hwy Jct or Town From Carmen, Ok., go west ±2.0 miles, then go ±2.0 miles south to the Southeast
 Corner of Section 17, T24N-R12W.

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DATUM: NAD-27
 LAT: 36°33'06.1" N
 LONG: 98°30'21.8" W
 LAT: 36.551691619° N
 LONG: 98.506057668° W
 STATE PLANE COORDINATES (US FEET):
 ZONE: OK NORTH
 X: 1851354
 Y: 565227

Date of Drawing: Sep. 07, 2018
 Invoice # 302504 Date Staked: July 18, 2018 JGW/AC

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