

API NUMBER: 143 24337

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

Approval Date: 05/12/2021
Expiration Date: 11/12/2022

Straight Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 21 Township: 19N Range: 11E County: TULSA

SPOT LOCATION: ☐ NW ☐ NE ☐ NW ☐ SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 2554 819

Lease Name: SWL Well No: 1 Well will be 300 feet from nearest unit or lease boundary.

Operator Name: CALVERT OPERATING LLC Telephone: 4058482222 OTC/OCC Number: 22765 0

CALVERT OPERATING LLC
5609 N CLASSEN BLVD STE 100
OKLAHOMA CITY, OK 73118-4032

TOM WARREN
3450 S 137TH WEST AVENUE
SAND SPRINGS OK 73118

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

Name	Code	Depth	Name	Code	Depth
1 BIG LIME	404BGLM	840	6 KINDERHOOK	351KDRK	2005
2 RED FORK	404RDFK	1370	7 WOODFORD	319WDFD	2035
3 INOLA	404INOL	1485	8 MISENER	319MSNR	2055
4 BOOCH	404BOCH	1725	9 SIMPSON	202SMPS	2060
5 MISSISSIPPI LIME	351MSSLM	1810	10 ARBUCKLE	169ABCK	2150

Spacing Orders: No Spacing

Location Exception Orders: No Exceptions

Increased Density Orders: No Density Orders

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special Orders

Total Depth: 2150

Ground Elevation: 754

Surface Casing: 100

Depth to base of Treatable Water-Bearing FM: 40

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

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

PIT 1 INFORMATION

Type of Pit System: ON SITE

Type of Mud System: AIR

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: 4

Liner not required for Category: 4

Pit Location is: NON HSA

Pit Location Formation: NELLIE BLY

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

NOTES:

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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
HYDRAULIC FRACTURING	<p>[5/4/2021 - GC2] - OCC 165:10-3-10 REQUIRES:</p> <p>1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;</p> <p>2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,</p> <p>3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG</p>
SPACING	[5/12/2021 - GC2] - FORMATIONS UPSPACED, 600-ACRE LEASE MINUS NW4 NW4

Well Location Plat

Sec. 21-T19N-R11E I.M.

Operator: CALVERT OPERATING

Lease Name and No.: SWL #1

Surface Hole Location: 2554' FSL - 819' FWL Gr. Elevation: 754'

NW/4-NE/4-NW/4-SW/4 Section: 21 Township: 19N Range: 11E I.M.

County: Tulsa State of Oklahoma

Terrain at Loc.: Location fell in scattered timber, $\pm 90'$ NW of the centerline of an existing road.All bearings shown
are grid bearings.

0' 500' 1000' 1500'

1" = 1000'

GPS DATUM

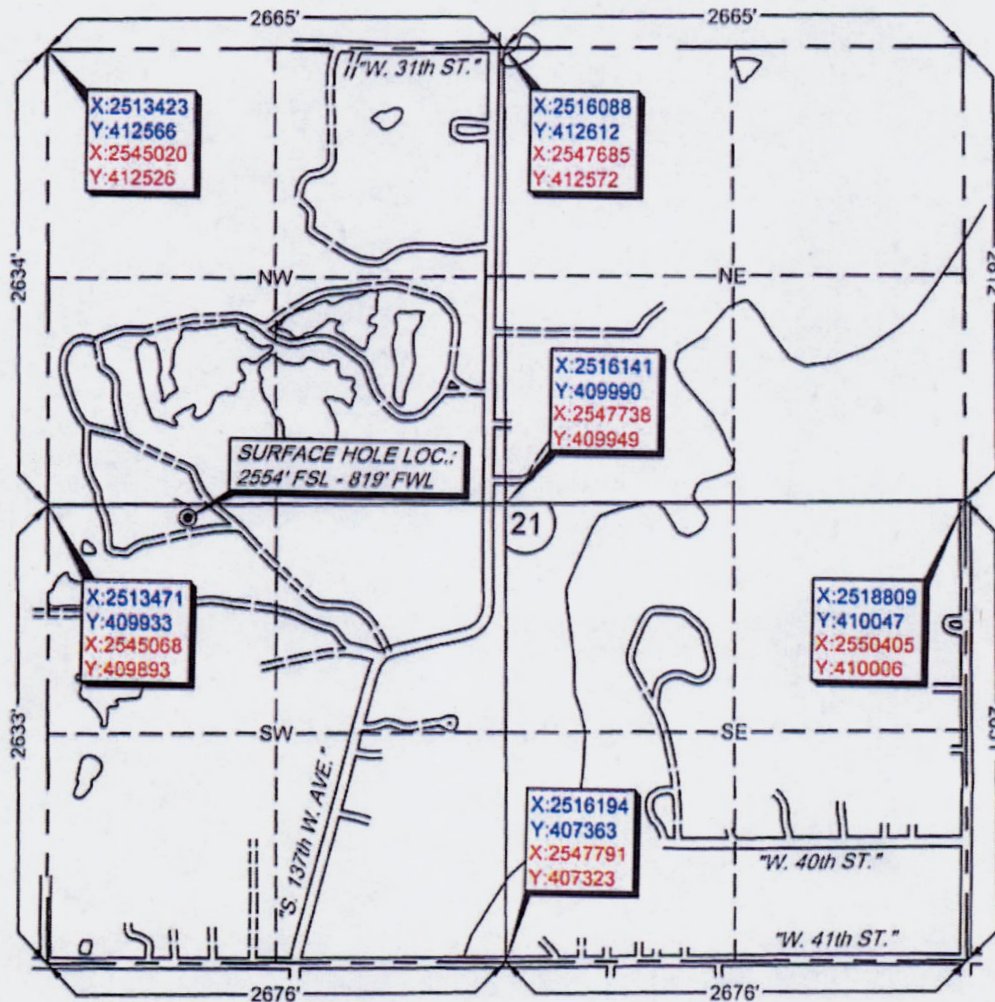
NAD 83

NAD 27

OK NORTH ZONE

Surface Hole Loc.:
 Lat: 36°06'42.13"N
 Lon: 96°09'07.63"W
 Lat: 36.11170165
 Lon: -96.15211876
 X: 2514291
 Y: 409873

Surface Hole Loc.:
 Lat: 36°06'41.81"N
 Lon: 96°09'06.61"W
 Lat: 36.11161523
 Lon: -96.15183748
 X: 2545888
 Y: 409833



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 herein 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 corners, and may not have been measured on-the-ground, and further, does not represent a true Boundary Survey.

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, 2022

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

04/06/2021

OK LPLS 1664



Invoice #9323

Date Staked: 03/29/2021 By: B.M.

Date Drawn: 03/31/2021 By: J.K.

Revise Lse. Nm.: 04/05/2021 By: R.M.

Revise Lse. Nm.: 04/06/2021 By: R.M.

Well Location Plat

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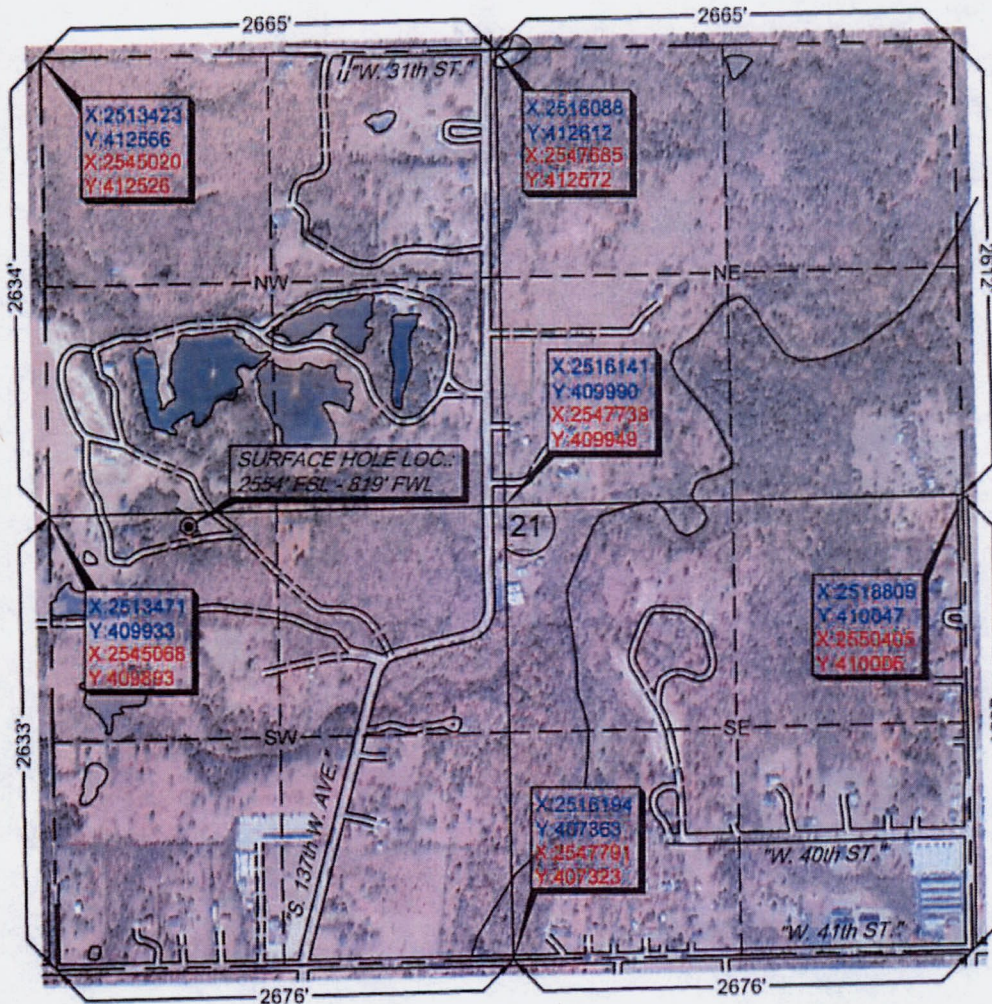
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Lat: 36.11161523

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Y: 409833



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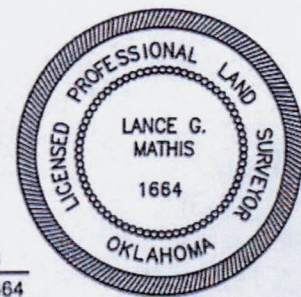
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Lance G. Mathis
LANCE G. MATHIS

04/06/2021

OK LPLS 1664



Topographic Vicinity Map

Operator: CALVERT OPERATING

Lease Name and No.: SWL #1

Surface Hole Location: 2554' FSL - 819' FWL

Section: 21 Township: 19N Range: 11E I.M.

County: Tulsa State of Oklahoma



Ground Elevation at Surface Hole Location: 754'

Scale 1" = 2000'
Contour Interval: 10'



Provided 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, 2022

Date Staked: 03/29/2021

The purpose of this map is to verify the location and elevation as staked on the ground and to show the surrounding Topographic features. The footage shown hereon is only as SCALED onto a U.S.G.S. Topographic Map.

Please note that this location was staked carefully 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.

Job #: 9323-ALT A
Operator: CALVERT OPERATING
Lease Name and No.: SWL #1

Directions: From the junction of State Highway 51 & "S. 137th W. Ave." Southeast of the town of Sand Springs, OK, go 1.0 mile South on "S. 137th W. Ave.", to the West half of Section 21-19N-11E on the West side of the road.

provided by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Willborton, OK 74078
Ph. 918-465-0711 Fax 918-465-5020
Certificate of Authorization No. 0348
Expires June 30, 2010

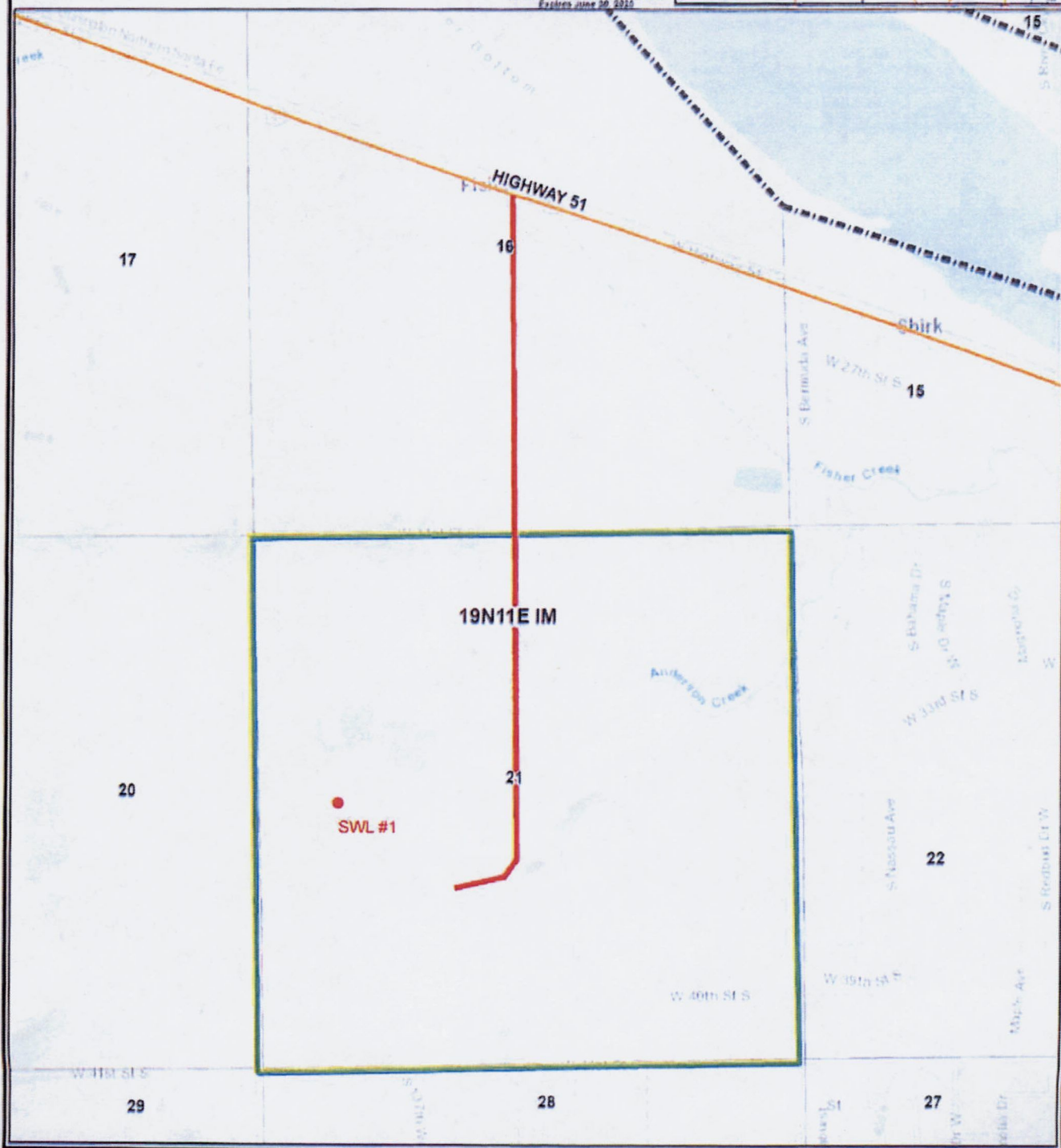
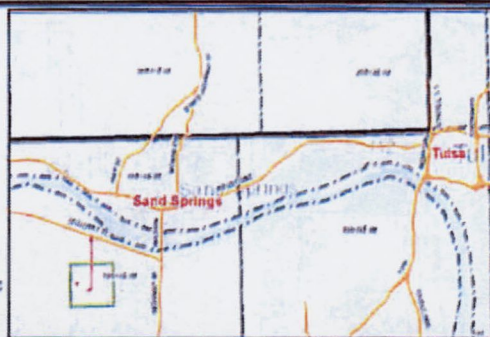
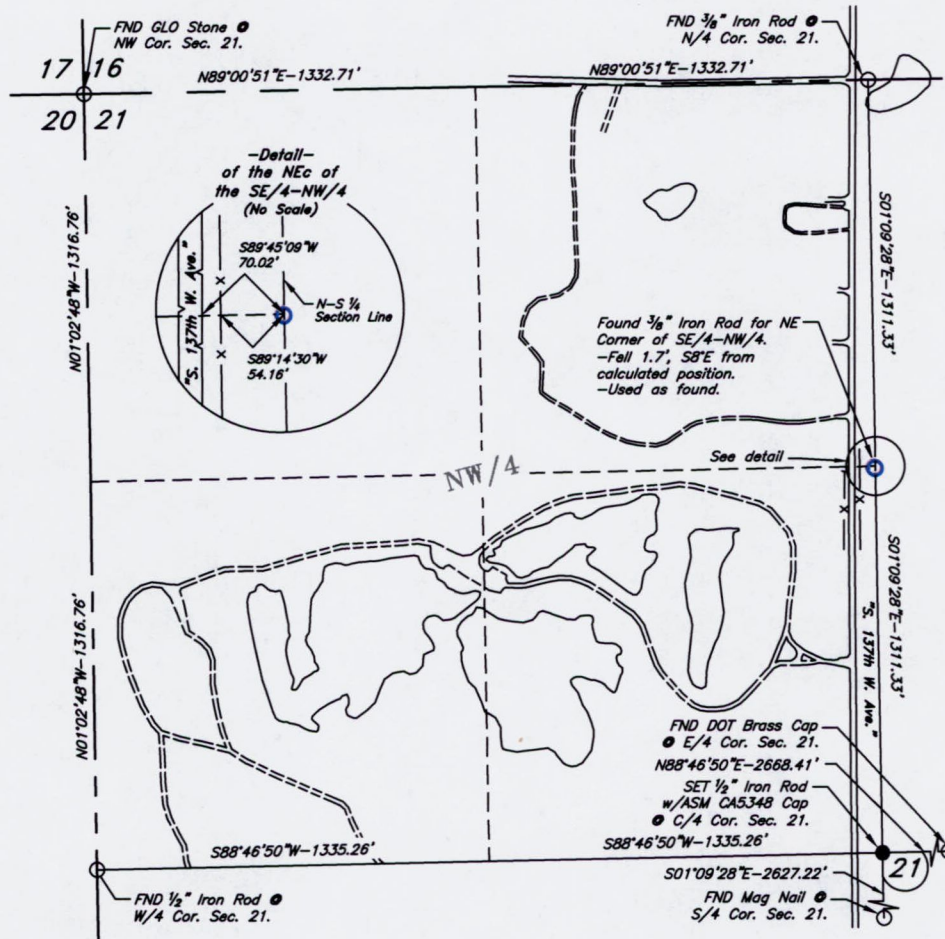
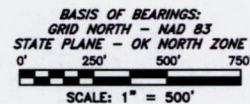
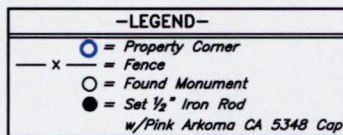


EXHIBIT "A"

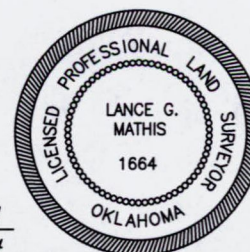
T 19 N - R 11 E



This is to certify that this Plat of Survey represents the results of a survey made on-the-ground, performed under the supervision of the undersigned, at the request of Calvert Operating, and further, that this Survey was made in compliance with the Minimum Standards for Land Surveying in Oklahoma.

04/23/2021

L.P.L.S. #1664



SURV. BY: H.S. 04/15/2021	SCALE: 1" = 500'
DRAWN BY: J.K. 04/22/2021	JOB NO.: 9323
APPROVED BY: L.G.M.	DRAW. NO.: 9323-BNDRY
SHEET 1 OF 1	SHEET SIZE: 8.5" X 14"



SURVEY & MAPPING BY:
ARKOMA SURVEYING & MAPPING, PLLC
(918)465-5711 P.O. Box 238 C.A. #5348
(918)465-5030 fax Willburton, OK 74578 EXP. DATE 6-30-22

NO.	REVISION DESCRIPTION	DATE	BY