



Directional Drilling

Horizontal Drilling

MWD/LWD

Mud Motors

February 9, 2023

Railroad Commission of Texas  
Oil and Gas Division  
P.O. Box 12967  
Capitol Station  
Austin, Texas 78711

Attention: Pamela Johns

Re: Forge Energy Operating, LLC  
UL Eclipse 16-29-24 WA2 #2H  
Ward County, Texas  
API No. 42-475-38511

Enclosed, please find the original and one copy of the survey performed on the referenced well by Aim Directional Services, LLC (P-5 No. 009134). Other information required by your office is as follows:

<u>Name &amp; Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Date Performed</u>	<u>Type of Survey</u>
Breana Wooley Performance and Regulatory Manager	Original hole	164' - 3335'	01/31/23 – 02/11/23	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and the lease line (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

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Breana Wooley  
Performance and Regulatory Manager

Enclosures  
cc:



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State of Texas  
County of Ward

I, Breana Wooley, certify that; I am employed by Aim Directional Services, LLC; that I did on the day(s) of January 31, 2023 through February 11, 2023 conduct or supervise the taking of a directional MWD survey from a depth of 164 feet to a depth of 3335 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Aim Directional Services, LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of Forge Energy Operating, LLC for UL Eclipse 16-29-24 WA2 #2H API No. 42-475-38511 in Ward County, Texas; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Aim Directional Services, LLC.

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Breana Wooley  
Performance and Regulatory Manager



# Aim Directional Services

## Survey Report

<b>Company:</b>	Forge Energy II	<b>Local Co-ordinate Reference:</b>	Well UL Eclipse 16-29-24 WA2 #2H
<b>Project:</b>	Ward County, Texas (NAD27)	<b>TVD Reference:</b>	Well @ 2627.10usft (H&P 474)
<b>Site:</b>	UL Eclipse 16-29-24 WA2 #2H	<b>MD Reference:</b>	Well @ 2627.10usft (H&P 474)
<b>Well:</b>	UL Eclipse 16-29-24 WA2 #2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys	<b>Database:</b>	EDM 5000.17-Aim-DB

<b>Project</b>	Ward County, Texas (NAD27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Texas Central 4203		

<b>Site</b>	UL Eclipse 16-29-24 WA2 #2H		
<b>Site Position:</b>		<b>Northing:</b>	679,508.89 usft
<b>From:</b>	Map	<b>Easting:</b>	1,137,269.62 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	31.50552
		<b>Longitude:</b>	-103.10189

<b>Well</b>	UL Eclipse 16-29-24 WA2 #2H		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 679,508.89 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 1,137,269.62 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>	-1.43 °	<b>Ground Level:</b>	2,601.10 usft

<b>Wellbore</b>	OH		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	MVHD	2/2/2023	6.66
			<b>Dip Angle (°)</b>
			59.33
			<b>Field Strength (nT)</b>
			47,150.50723157

<b>Design</b>	Surveys		
<b>Audit Notes:</b>			
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL
		<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>
	0.00	0.00	0.00
			<b>Direction (°)</b>
			73.69

<b>Survey Program</b>	<b>Date</b>	2/4/2023		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
164.00	3,335.00	Aim OH Surveys (OH)	B001Mb_MWD+HRGM	OWSG MWD + HRGM

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	
164.00	0.04	186.24	164.00	-0.06	-0.01	-0.02	0.024	0.024	0.000	
<b>First OH Svy</b>										
340.00	1.67	254.89	339.97	-0.79	-2.49	-2.61	0.941	0.926	39.006	
433.00	2.55	264.55	432.91	-1.34	-5.86	-6.00	1.017	0.946	10.387	
529.00	1.80	259.72	528.84	-1.81	-9.47	-9.59	0.804	-0.781	-5.031	
624.00	2.24	254.01	623.78	-2.59	-12.72	-12.93	0.509	0.463	-6.011	
815.00	0.48	189.41	814.73	-4.40	-16.44	-17.01	1.089	-0.921	-33.822	
909.00	0.35	194.24	908.72	-5.07	-16.57	-17.33	0.143	-0.138	5.138	
1,005.00	0.26	265.61	1,004.72	-5.37	-16.86	-17.69	0.378	-0.094	74.344	



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<b>Well:</b>	UL Eclipse 16-29-24 WA2 #2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys	<b>Database:</b>	EDM 5000.17-Aim-DB

### Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,100.00	0.53	348.49	1,099.72	-4.96	-17.17	-17.87	0.590	0.284	87.242
1,195.00	1.05	12.22	1,194.71	-3.68	-17.07	-17.41	0.636	0.547	24.979
1,287.00	1.23	29.71	1,286.69	-1.99	-16.40	-16.30	0.423	0.196	19.011
1,382.00	1.93	24.35	1,381.66	0.35	-15.24	-14.53	0.752	0.737	-5.642
1,570.00	1.05	89.21	1,569.60	3.26	-12.21	-10.80	0.937	-0.468	34.500
1,665.00	1.05	158.65	1,664.59	2.46	-11.02	-9.89	1.259	0.000	73.095
1,759.00	0.84	164.71	1,758.58	0.99	-10.53	-9.82	0.247	-0.223	6.447
1,853.00	1.10	131.84	1,852.57	-0.28	-9.67	-9.36	0.641	0.277	-34.968
1,948.00	1.58	115.23	1,947.54	-1.44	-7.81	-7.90	0.645	0.505	-17.484
2,042.00	1.89	103.19	2,041.50	-2.35	-5.13	-5.58	0.507	0.330	-12.809
2,136.00	1.76	95.54	2,135.45	-2.84	-2.18	-2.89	0.293	-0.138	-8.138
2,230.00	1.98	108.20	2,229.40	-3.49	0.80	-0.21	0.496	0.234	13.468
2,325.00	1.80	101.25	2,324.35	-4.29	3.82	2.46	0.306	-0.189	-7.316
2,419.00	1.27	86.66	2,418.31	-4.52	6.31	4.79	0.696	-0.564	-15.521
2,513.00	1.63	87.54	2,512.28	-4.40	8.69	7.10	0.384	0.383	0.936
2,608.00	1.32	115.40	2,607.25	-4.81	11.02	9.23	0.812	-0.326	29.326
2,702.00	0.70	170.42	2,701.24	-5.84	12.10	9.97	1.152	-0.660	58.532
2,796.00	0.88	238.80	2,795.23	-6.78	11.58	9.20	0.958	0.191	72.745
2,890.00	2.15	197.23	2,889.20	-8.84	10.44	7.53	1.704	1.351	-44.223
2,984.00	3.56	190.02	2,983.08	-13.40	9.41	5.26	1.545	1.500	-7.670
3,078.00	4.88	174.99	3,076.83	-20.26	9.25	3.19	1.821	1.404	-15.989
3,173.00	5.32	173.69	3,171.45	-28.66	10.08	1.63	0.479	0.463	-1.368
3,268.00	5.98	170.16	3,265.99	-37.91	11.41	0.31	0.785	0.695	-3.716
Last OH Svy									
3,335.00	5.98	170.16	3,332.63	-44.79	12.61	-0.48	0.000	0.000	0.000
Proj to OH BHL									

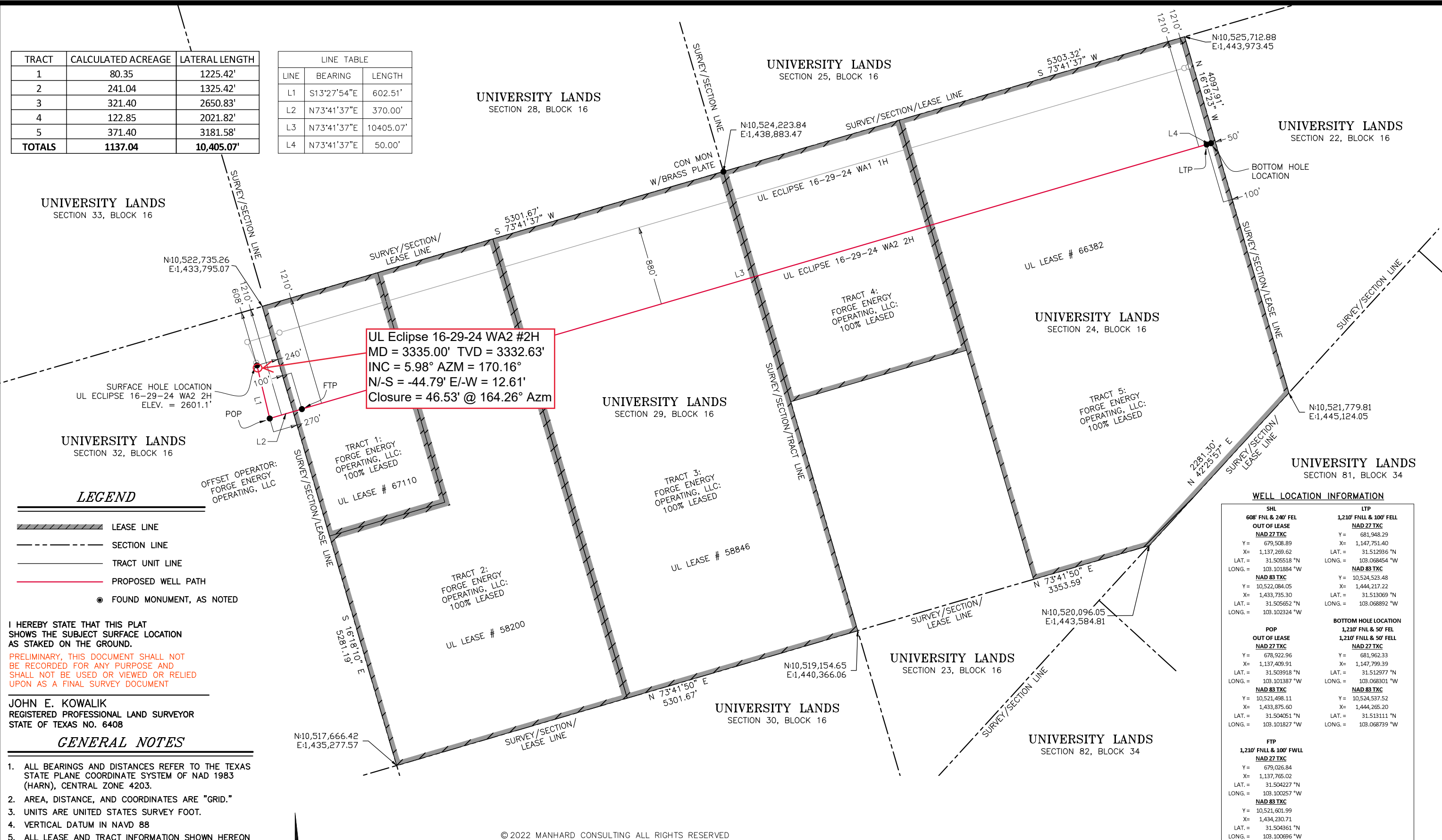
### Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
164.00	164.00	-0.06	-0.01	First OH Svy
3,268.00	3,265.99	-37.91	11.41	Last OH Svy
3,335.00	3,332.63	-44.79	12.61	Proj to OH BHL

Checked By: _____	Approved By: _____	Date: _____
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TRACT	CALCULATED ACREAGE	LATERAL LENGTH
1	80.35	1225.42'
2	241.04	1325.42'
3	321.40	2650.83'
4	122.85	2021.82'
5	371.40	3181.58'
TOTALS	1137.04	10,405.07'

LINE TABLE		
LINE	BEARING	LENGTH
L1	S13°27'54"E	602.51'
L2	N73°41'37"E	370.00'
L3	N73°41'37"E	10405.07'
L4	N73°41'37"E	50.00'



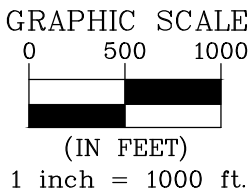
I HEREBY STATE THAT THIS PLAT SHOWS THE SUBJECT SURFACE LOCATION AS STAKED ON THE GROUND.

PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT

JOHN E. KOWALIK  
REGISTERED PROFESSIONAL LAND SURVEYOR  
STATE OF TEXAS NO. 6408

### GENERAL NOTES

- ALL BEARINGS AND DISTANCES REFER TO THE TEXAS STATE PLANE COORDINATE SYSTEM OF NAD 1983 (HARN), CENTRAL ZONE 4203.
- AREA, DISTANCE, AND COORDINATES ARE "GRID."
- UNITS ARE UNITED STATES SURVEY FOOT.
- VERTICAL DATUM IN NAVD 88
- ALL LEASE AND TRACT INFORMATION SHOWN HEREON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACRESAGES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".
- LOCATION OF PIPELINES SHOWN ARE BASED ON THE USE OF SCARS AND PIPELINES SHOWN ARE BASED ON THE USE SCARS AND PIPELINE MARKERS. PIPELINES WERE COVERED.
- CALL BEFORE YOU DIG - TEXAS811.ORG



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505 Pecan Street, Suite 201, Fort Worth, TX 76102  
p h : 8 1 7 . 8 6 5 . 5 3 4 4 m a n h a r d . c o m  
Texas Board of Professional Engineers &  
Land Surveyors Reg. No. F-10194754 (Surv), F-21732 (Eng)



PLAT OF:  
A PROPOSED WELL LOCATION FOR:  
**FORGE ENERGY OPERATING, LLC**  
ECLIPSE 16-29-24 WA2 2H

CHECKED BY:  
**RS**

DRAWN BY:  
**RS**

DATE:  
**2022-11-29**

FIELD CREW:  
**DN**

SCALE:  
**1" = 1000'**

REVISION NO.:  
**0**

PROJECT NO.:  
**618.004007.02**

SHEET:  
**1**

SITUATED IN THE UNIVERSITY LANDS SURVEY, SECTIONS 29, 24, AND 32, ALL BEING IN BLK 16, AND BEING LOCATED APPROXIMATELY 3.0 MILES SOUTHEAST OF PYOTE IN WARD COUNTY, TEXAS.

Dwg Name: P:\618\004 Forge II\007 Eclipse DSU Lease\dwg\Surv\Work Area\618\004007.00\_FORGE\_II\_ECLIPSE\_DSU\_2H\_PERMIT\_PLAT\_REV\_11-29-2022.dwg Updated By: JKowalik 10:52