



February 11, 2020

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

Attention: Regulatory Department

Re: Chevron
War University 18 22-24 0011WA
Ward County, Texas
API #42-475-38050
Job No. 66170

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

| Name & Title of Surveyor | Drain Hole Number | Surveyed Depths | | Dates Performed | | Type of Survey |
|--------------------------|-------------------|-----------------|-------|-----------------|--------|----------------|
| | | From | To | Start | End | |
| August Holt | 0011WA | 190 | 1,127 | 2/6/20 | 2/6/20 | MWD |

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (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.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator



Chevron

**Ward County, TX (NAD27 TC)
WAR University 18 22-24
0011WA**

OH / 66170

Survey: Phoenix MWD Surveys

Standard Survey Report

06 February, 2020





Survey Report



| | | | |
|------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | Chevron | Local Co-ordinate Reference: | Well 0011WA |
| Project: | Ward County, TX (NAD27 TC) | TVD Reference: | RKB @ 2824.00usft (Pinnergy 1) |
| Site: | WAR University 18 22-24 | MD Reference: | RKB @ 2824.00usft (Pinnergy 1) |
| Well: | 0011WA | North Reference: | Grid |
| Wellbore: | OH / 66170 | Survey Calculation Method: | Minimum Curvature |
| Design: | Surveys (Pinnergy 1) | Database: | USA Compass |

| | | | |
|--------------------|--------------------------------------|----------------------|----------------|
| Project | Ward County, TX (NAD27 TC) | | |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum: | NAD 1927 (NADCON CONUS) | | |
| Map Zone: | Texas Central 4203 | | |

| | | | |
|------------------------------|-------------------------|--------------------------|----------------------|
| Site | WAR University 18 22-24 | | |
| Site Position: | | Northing: | 719,733.00 usft |
| From: | Map | Easting: | 1,085,633.00 usft |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16 " |
| | | Latitude: | 31° 36' 44.736314 N |
| | | Longitude: | 103° 16' 15.320011 W |
| | | Grid Convergence: | -1.51 ° |

| | | | |
|-----------------------------|--------------|----------------------------|-----------------------------------|
| Well | 0011WA | | |
| Well Position | +N/-S | 0.00 usft | Northing: 718,911.00 usft |
| | +E/-W | 0.00 usft | Easting: 1,082,821.00 usft |
| Position Uncertainty | 1.00 usft | Wellhead Elevation: | usft |
| | | Latitude: | 31° 36' 35.867808 N |
| | | Longitude: | 103° 16' 47.575888 W |
| | | Ground Level: | 2,817.00 usft |

| | | | |
|------------------|-------------------|--------------------|----------------------------|
| Wellbore | OH / 66170 | | |
| Magnetics | Model Name | Sample Date | Declination (°) |
| | MVHD | 2/6/2020 | 6.99 |
| | | | Dip Angle (°) |
| | | | 59.41 |
| | | | Field Strength (nT) |
| | | | 47,320.05227438 |

| | | | |
|--------------------------|--------------------------------|----------------------|----------------------|
| Design | Surveys (Pinnergy 1) | | |
| Audit Notes: | | | |
| Version: | 1.0 | Phase: | ACTUAL |
| | | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) |
| | 0.00 | 0.00 | 0.00 |
| | | | Direction (°) |
| | | | 343.71 |

| | | | | |
|-----------------------|------------------|----------------------------------|------------------|--------------------|
| Survey Program | Date | 2/6/2020 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 190.00 | 1,201.00 | Phoenix MWD Surveys (OH / 66170) | MWD+HRGM | OWSG MWD + HRGM |

| | | | | | | | | | |
|---------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|
| 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) |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 190.00 | 0.35 | 323.19 | 190.00 | 0.46 | -0.35 | 0.54 | 0.18 | 0.18 | 0.00 |
| First Phoenix MWD Survey | | | | | | | | | |
| 281.00 | 0.67 | 353.94 | 281.00 | 1.22 | -0.57 | 1.33 | 0.45 | 0.35 | 33.79 |
| 371.00 | 0.66 | 7.64 | 370.99 | 2.25 | -0.56 | 2.32 | 0.18 | -0.01 | 15.22 |
| 463.00 | 0.82 | 7.83 | 462.98 | 3.43 | -0.40 | 3.40 | 0.17 | 0.17 | 0.21 |
| 556.00 | 0.60 | 8.20 | 555.97 | 4.57 | -0.24 | 4.45 | 0.24 | -0.24 | 0.40 |
| 649.00 | 0.67 | 339.18 | 648.97 | 5.56 | -0.36 | 5.44 | 0.35 | 0.08 | -31.20 |
| 743.00 | 0.45 | 6.83 | 742.96 | 6.44 | -0.51 | 6.33 | 0.36 | -0.23 | 29.41 |
| 835.00 | 0.34 | 117.14 | 834.96 | 6.68 | -0.23 | 6.47 | 0.71 | -0.12 | 119.90 |
| 930.00 | 0.95 | 152.75 | 929.96 | 5.85 | 0.39 | 5.50 | 0.74 | 0.64 | 37.48 |



Survey Report



| | | | |
|------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | Chevron | Local Co-ordinate Reference: | Well 0011WA |
| Project: | Ward County, TX (NAD27 TC) | TVD Reference: | RKB @ 2824.00usft (Pinnergy 1) |
| Site: | WAR University 18 22-24 | MD Reference: | RKB @ 2824.00usft (Pinnergy 1) |
| Well: | 0011WA | North Reference: | Grid |
| Wellbore: | OH / 66170 | Survey Calculation Method: | Minimum Curvature |
| Design: | Surveys (Pinnergy 1) | Database: | USA Compass |

| 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) |
| 1,024.00 | 0.93 | 168.62 | 1,023.94 | 4.41 | 0.89 | 3.98 | 0.28 | -0.02 | 16.88 |
| 1,127.00 | 1.04 | 171.52 | 1,126.93 | 2.66 | 1.20 | 2.22 | 0.12 | 0.11 | 2.82 |
| Final Phoenix MWD Survey | | | | | | | | | |
| 1,201.00 | 1.04 | 171.52 | 1,200.92 | 1.33 | 1.39 | 0.89 | 0.00 | 0.00 | 0.00 |
| Projection to TD | | | | | | | | | |

| Survey Annotations | | | | |
|-----------------------|-----------------------|-------------------|--------------|--------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
| | | +N/-S (usft) | +E/-W (usft) | |
| 190.00 | 190.00 | 0.46 | -0.35 | First Phoenix MWD Survey |
| 1,127.00 | 1,126.93 | 2.66 | 1.20 | Final Phoenix MWD Survey |
| 1,201.00 | 1,200.92 | 1.33 | 1.39 | Projection to TD |

Approx. 10.65 Miles Northwesterly
From "PYOTE, TEXAS"

 Approximate Survey Lines
 Lease Lines
 Unit Line

| | | |
|-------|--------------|----------|
| X= | 1,082,821 | NAD 27 |
| Y= | 718,911 | |
| LAT. | 31.609964 N | |
| LONG. | 103.279883 W | |
| X= | 1,379,286 | NAD83/86 |
| Y= | 10,561,487 | |
| LAT. | 31.610095 N | |
| LONG. | 103.280329 W | |

| | | |
|-------|--------------|----------|
| | PP | |
| X= | 1,082,296 | NAD 27 |
| Y= | 719,033 | |
| LAT. | 31.610259 N | |
| LONG. | 103.281579 W | |
| X= | 1,378,761 | NAD83/86 |
| Y= | 10,561,608 | |
| LAT. | 31.610390 N | |
| LONG. | 103.282025 W | |

| PUPPI/FTP | | |
|-----------|--------------|----------|
| X= | 1,082,212 | NAD 27 |
| Y= | 719,321 | |
| LAT. | 31.611045 N | |
| LONG. | 103.281873 W | |
| X= | 1,378,677 | NAD83/86 |
| Y= | 10,561,897 | |
| LAT. | 31.611176 N | |
| LONG. | 103.282319 W | |

| PLPP/LTP | | |
|----------|--------------|----------|
| X= | 1,079,303 | NAD 27 |
| Y= | 729,276 | |
| LAT. | 31.638193 N | |
| LONG. | 103.292063 W | |
| X= | 1,375,768 | NAD83/86 |
| Y= | 10,571,852 | |
| LAT. | 31.638323 N | |
| LONG. | 103.292510 W | |

| PBHL/TL | | |
|---------|--------------|----------|
| X= | 1,079,282 | NAD 27 |
| Y= | 729,348 | |
| LAT. | 31.638389 N | |
| LONG. | 103.292137 W | |
| X= | 1,375,747 | NAD83/86 |
| Y= | 10,571,924 | |
| LAT. | 31.638520 N | |
| LONG. | 103.292584 W | |

| Ownership | Tract No. | Area In Acres | Percentage Of Unit |
|---------------------------------|-----------|---------------|--------------------|
| UT LEASE #62242 | 1 | 320.580 | 50.0092038 |
| STATE OF TEXAS GLO LEASE #66423 | 2 | 320.462 | 49.9907962 |
| Total: | | 641.042 | 100.0000000 |

SURFACE LOCATION:
464' To North Survey Line
800' To West Survey Line
464' To North Lease Line
800' To West Lease Line

PP:
200' To North Survey Line
330' To West Survey Line
200' To North Lease Line
330' To West Lease Line

PUPP/FTP:
100' To South Survey Line
330' To West Survey Line
100' To South Lease Line
330' To West Lease Line
100' To South Unit Line
330' To West Unit Line

PLPP/LTP:
100' To North Survey Line
330' To West Survey Line
100' To North Lease Line
330' To West Lease Line
100' To North Unit Line
330' To West Unit Line

PBHL/TL:
 25' To North Survey Line
 330' To West Survey Line
 25' To North Lease Line
 330' To West Lease Line
 25' To North Unit Line
 330' To West Unit Line

PUPP= PROPOSED UPPER PERFORATION POINT
PLPP= PROPOSED LOWER PERFORATION POINT
PBHL= PROPOSED BOTTOM HOLE LOCATION

PP= PENETRATION POINT
FTP= FIRST TAKE POINT
LTP= LAST TAKE POINT
TL= TERMINUS LOCATION

FOR THE EXCLUSIVE USE OF
CHEVRON U.S.A. INC.
I, Rex R. Jones, Registered Professional
Land Surveyor, do hereby state this plat is true
and correct to the best of my knowledge.

FOR THE EXCLUSIVE USE OF
CHEVRON U.S.A. INC.

I, Rex R. Jones, Registered Professional
Land Surveyor, do hereby state this plat is true
and correct to the best of my knowledge.

Rex R. Jones
Registration No. 6024

NOTES:

1. This plat represents a survey made on the ground and meets the requirements for filing a well location plat with the Texas Railroad Commission and is intended solely for that purpose. Lease lines shown hereon were established from field measurements and record data. Mineral title shown hereon was furnished by Chevron U.S.A. Inc. and/or their agent(s). This plat does not meet the requirements for boundary surveys in the State of Texas.
2. All bearings, distances, areas and coordinates refer to the Texas Coordinate System of 1927, Central Zone.



2000' 0 1000' 2000'

Scale: 1" = 2000'



C. H. Fenstermaker & Associates, L.L.C.
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com
Texas Firm No. 10028500

WELL LOCATION PLAT
CHEVRON U.S.A. INC.

WAR UNIVERSITY 18 22/24 NO. 0011WA WELL
UNIVERSITY LANDS SURVEY, ABSTRACT NO. U101, SEC. 22, BLK 18
WARD COUNTY, TEXAS

| | | REVISIONS | | |
|------------------|---|-----------|------------|--------------|
| DRAWN BY: KJD | # | BY: | DATE: | DESCRIPTION: |
| PROJ. MGR.: GDG | 2 | RMB | 09/12/2019 | Added Unit |
| DATE: 03/29/2019 | 3 | RMB | 10/03/2019 | Added PP |

FILE NAME: T:\2019\2190157\DWG\WAR University 18 22 24 0011WA RRC.dwg

SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

Job #: 66170
 Client: Chevron
 County & State: Ward County, Texas
 Well: WAR University 18 22-24 0011WA
 API No: 42-475-38050
 Proposed Direction: 343.71°

TIE-IN DATA

| MD | TVD | INC | AZM | N/-S | E/-W | DATA SOURCE |
|----------------------|---------|-------|-------|------|------|-------------|
| 0.00 ft | 0.00 ft | 0.00° | 0.00° | . N | . E | Surface |
| Data Source Company: | | | | | | PHX |

SURVEY DATA

| First Survey Date | First Survey Depth | INC | AZM |
|-------------------|--------------------|-------|---------|
| 6-Feb-20 | 190 ft | 0.35° | 323.19° |

| Last Survey Date | Last Survey Depth | INC | AZM |
|------------------|-------------------|-------|---------|
| 6-Feb-20 | 1,127 ft | 1.04° | 171.52° |

| Survey Instrument Type |
|------------------------------|
| Phoenix P360 Pulse Telemetry |

| Projected TD Survey Date | Projected TD Survey Depth | INC | AZM |
|--------------------------|---------------------------|-------|---------|
| 6-Feb-20 | 1,201 ft | 1.04° | 171.52° |

CORRECTION INFORMATION

| | |
|---------------------------|---------------|
| Magnetic Declination Used | 6.99 degrees |
| Grid Convergence Used | -1.51 degrees |
| Total Correction | 8.50 degrees |

| Corrected to True/Grid North |
|------------------------------|
| Grid North |

TO THE BEST OF MY KNOWLEDGE, I
 CERTIFY THIS SURVEY DATA TO BE
 TRUE AND CORRECT.

August Holt

Signature

2/6/2020

Date



Continental Resources

**Ward Co., TX (NAD-27)
UTL War University Pad
UTL War University 2324I #2209H
OH**

Survey: MWD Survey

RRC

23 September, 2022



| | | | |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| Company: | Continental Resources | Local Co-ordinate Reference: | Well UTL War University 2324I #2209H |
| Project: | Ward Co., TX (NAD-27) | TVD Reference: | KB=27 @ 2846.00usft |
| Site: | UTL War University Pad | MD Reference: | KB=27 @ 2846.00usft |
| Well: | UTL War University 2324I #2209H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Dusty Moyer Local |

| | | | |
|--------------------|--------------------------------------|----------------------|----------------|
| Project | Ward Co., TX (NAD-27) | | |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum: | NAD 1927 (NADCON CONUS) | | |
| Map Zone: | Texas Central 4203 | | |

| | | | | | |
|-----------------------|-----------|------------------------|-------------------|-------------------|-------------|
| Site | | UTL War University Pad | | | |
| Site Position: | | Northing: | 718,919.70 usft | Latitude: | 31.609989 |
| From: | Map | Easting: | 1,082,845.20 usft | Longitude: | -103.279805 |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16" | Grid Convergence: | -1.52 ° |

| | | | | | | |
|----------------------|---------------------------------|-----------|---------------------|-------------------|---------------|---------------|
| Well | UTL War University 2324I #2209H | | | | | |
| Well Position | +N/-S | 0.00 usft | Northing: | 718,911.80 usft | Latitude: | 31.609966 |
| | +E/-W | 0.00 usft | Easting: | 1,082,822.00 usft | Longitude: | -103.279879 |
| Position Uncertainty | | 0.00 usft | Wellhead Elevation: | usft | Ground Level: | 2,819.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | HDGM2022 | 6/28/2022 | 6.73 | 59.33 | 47,050.70000000 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| Design | OH | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 343.71 | |

| | | | | | |
|-----------------------|-----------------------|--------------------------|------------------|------------------------------|--|
| Survey Program | Date 9/23/2022 | | | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description | |
| 20.00 | 1,147.00 | Surface (OH) | MWD | OWSG MWD - Standard | |
| 1,259.00 | 22,162.00 | MWD Survey (OH) | MWD+HDGM+HDSA | OWSG Rev.2 MWD + HDGM + HDSA | |

| Survey | | | | | | | |
|------------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (°) |
| 1,147.00 | 1.04 | 171.52 | 1,146.93 | 2.66 | 1.20 | 2.92 | 24.17 |
| 1,259.00 | 0.53 | 174.63 | 1,258.92 | 1.14 | 1.39 | 1.80 | 50.67 |
| First AEP Survey | | | | | | | |
| 1,355.00 | 0.44 | 170.91 | 1,354.92 | 0.34 | 1.49 | 1.53 | 77.32 |
| 1,450.00 | 0.36 | 170.42 | 1,449.91 | -0.32 | 1.60 | 1.63 | 101.25 |
| 1,545.00 | 0.16 | 186.90 | 1,544.91 | -0.74 | 1.63 | 1.80 | 114.49 |
| 1,640.00 | 0.28 | 110.95 | 1,639.91 | -0.96 | 1.84 | 2.07 | 117.59 |
| 1,734.00 | 0.63 | 75.89 | 1,733.91 | -0.92 | 2.55 | 2.71 | 109.74 |
| 1,828.00 | 1.46 | 313.11 | 1,827.90 | 0.03 | 2.18 | 2.18 | 89.23 |
| 1,923.00 | 3.95 | 290.58 | 1,922.79 | 2.01 | -1.77 | 2.68 | 318.60 |
| 2,017.00 | 3.64 | 285.94 | 2,016.58 | 3.96 | -7.67 | 8.63 | 297.33 |

| | | | |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| Company: | Continental Resources | Local Co-ordinate Reference: | Well UTL War University 2324I #2209H |
| Project: | Ward Co., TX (NAD-27) | TVD Reference: | KB=27 @ 2846.00usft |
| Site: | UTL War University Pad | MD Reference: | KB=27 @ 2846.00usft |
| Well: | UTL War University 2324I #2209H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Dusty Moyer Local |

| Survey | | | | | | | | |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (°) | |
| 2,111.00 | 5.46 | 288.51 | 2,110.28 | 6.20 | -14.78 | 16.03 | 292.77 | |
| 2,205.00 | 6.59 | 292.41 | 2,203.76 | 9.68 | -24.01 | 25.89 | 291.96 | |
| 2,300.00 | 6.34 | 299.14 | 2,298.16 | 14.31 | -33.63 | 36.55 | 293.05 | |
| 2,394.00 | 5.89 | 305.91 | 2,391.62 | 19.67 | -42.07 | 46.44 | 295.06 | |
| 2,488.00 | 5.55 | 310.67 | 2,485.16 | 25.46 | -49.42 | 55.60 | 297.25 | |
| 2,582.00 | 5.61 | 306.81 | 2,578.71 | 31.18 | -56.55 | 64.57 | 298.87 | |
| 2,677.00 | 6.00 | 296.28 | 2,673.23 | 36.16 | -64.72 | 74.13 | 299.19 | |
| 2,771.00 | 6.23 | 280.46 | 2,766.70 | 39.26 | -74.14 | 83.89 | 297.90 | |
| 2,864.00 | 6.64 | 278.49 | 2,859.11 | 40.97 | -84.42 | 93.84 | 295.89 | |
| 2,959.00 | 5.90 | 281.58 | 2,953.54 | 42.76 | -94.64 | 103.85 | 294.31 | |
| 3,053.00 | 5.97 | 284.01 | 3,047.04 | 44.91 | -104.11 | 113.39 | 293.33 | |
| 3,146.00 | 7.06 | 279.54 | 3,139.44 | 47.03 | -114.44 | 123.73 | 292.34 | |
| 3,241.00 | 6.93 | 284.46 | 3,233.73 | 49.43 | -125.75 | 135.11 | 291.46 | |
| 3,335.00 | 6.55 | 287.41 | 3,327.08 | 52.45 | -136.36 | 146.09 | 291.04 | |
| 3,429.00 | 6.96 | 287.28 | 3,420.43 | 55.74 | -146.91 | 157.13 | 290.78 | |
| 3,524.00 | 6.61 | 289.01 | 3,514.76 | 59.24 | -157.58 | 168.34 | 290.60 | |
| 3,618.00 | 5.70 | 293.72 | 3,608.22 | 62.88 | -166.96 | 178.41 | 290.64 | |
| 3,712.00 | 6.15 | 285.38 | 3,701.72 | 66.09 | -176.09 | 188.09 | 290.57 | |
| 3,807.00 | 7.26 | 274.90 | 3,796.07 | 67.95 | -186.98 | 198.95 | 289.97 | |
| 3,901.00 | 6.59 | 275.20 | 3,889.39 | 68.95 | -198.27 | 209.92 | 289.17 | |
| 3,996.00 | 4.88 | 275.00 | 3,983.91 | 69.79 | -207.73 | 219.14 | 288.57 | |
| 4,089.00 | 4.03 | 272.28 | 4,076.63 | 70.27 | -214.93 | 226.13 | 288.10 | |
| 4,184.00 | 6.14 | 283.33 | 4,171.25 | 71.57 | -223.21 | 234.41 | 287.78 | |
| 4,278.00 | 5.31 | 284.02 | 4,264.78 | 73.79 | -232.32 | 243.76 | 287.62 | |
| 4,373.00 | 4.18 | 289.23 | 4,359.45 | 75.99 | -239.86 | 251.61 | 287.58 | |
| 4,467.00 | 5.87 | 281.82 | 4,453.09 | 78.10 | -247.80 | 259.82 | 287.49 | |
| 4,561.00 | 6.83 | 283.81 | 4,546.51 | 80.42 | -257.93 | 270.18 | 287.32 | |
| 4,656.00 | 5.45 | 282.33 | 4,640.97 | 82.73 | -267.82 | 280.31 | 287.17 | |
| 4,750.00 | 5.05 | 285.16 | 4,734.57 | 84.77 | -276.18 | 288.90 | 287.06 | |
| 4,845.00 | 4.45 | 282.24 | 4,829.24 | 86.64 | -283.82 | 296.75 | 286.98 | |
| 4,939.00 | 6.78 | 268.67 | 4,922.79 | 87.29 | -292.93 | 305.66 | 286.59 | |
| 5,033.00 | 6.32 | 271.36 | 5,016.18 | 87.28 | -303.65 | 315.94 | 286.04 | |
| 5,127.00 | 5.54 | 272.66 | 5,109.67 | 87.62 | -313.35 | 325.37 | 285.62 | |
| 5,221.00 | 6.64 | 268.89 | 5,203.14 | 87.72 | -323.32 | 335.01 | 285.18 | |
| 5,316.00 | 8.31 | 274.46 | 5,297.33 | 88.15 | -335.66 | 347.04 | 284.71 | |
| 5,409.00 | 8.46 | 274.12 | 5,389.34 | 89.16 | -349.18 | 360.38 | 284.32 | |
| 5,503.00 | 8.85 | 274.19 | 5,482.27 | 90.19 | -363.29 | 374.32 | 283.94 | |
| 5,597.00 | 8.68 | 273.87 | 5,575.17 | 91.20 | -377.58 | 388.43 | 283.58 | |
| 5,691.00 | 8.93 | 272.79 | 5,668.06 | 92.03 | -391.94 | 402.60 | 283.21 | |
| 5,785.00 | 8.10 | 275.77 | 5,761.03 | 93.05 | -405.82 | 416.35 | 282.91 | |
| 5,879.00 | 7.22 | 274.29 | 5,854.19 | 94.16 | -418.30 | 428.76 | 282.69 | |
| 5,974.00 | 7.12 | 273.51 | 5,948.44 | 94.97 | -430.13 | 440.49 | 282.45 | |
| 6,068.00 | 5.72 | 275.32 | 6,041.85 | 95.76 | -440.61 | 450.89 | 282.26 | |
| 6,162.00 | 4.40 | 276.09 | 6,135.48 | 96.57 | -448.86 | 459.13 | 282.14 | |
| 6,256.00 | 4.44 | 278.18 | 6,229.20 | 97.47 | -456.04 | 466.34 | 282.06 | |

| | | | |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| Company: | Continental Resources | Local Co-ordinate Reference: | Well UTL War University 2324I #2209H |
| Project: | Ward Co., TX (NAD-27) | TVD Reference: | KB=27 @ 2846.00usft |
| Site: | UTL War University Pad | MD Reference: | KB=27 @ 2846.00usft |
| Well: | UTL War University 2324I #2209H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Dusty Moyer Local |

| Survey | | | | | | | |
|-----------------------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (°) |
| 6,350.00 | 4.51 | 275.15 | 6,322.92 | 98.32 | -463.33 | 473.64 | 281.98 |
| 6,444.00 | 4.43 | 279.33 | 6,416.63 | 99.24 | -470.59 | 480.94 | 281.91 |
| 6,538.00 | 4.47 | 281.32 | 6,510.35 | 100.55 | -477.76 | 488.23 | 281.89 |
| 6,633.00 | 4.83 | 281.57 | 6,605.04 | 102.08 | -485.31 | 495.93 | 281.88 |
| 6,727.00 | 4.72 | 283.99 | 6,698.71 | 103.81 | -492.94 | 503.75 | 281.89 |
| 6,822.00 | 4.93 | 280.82 | 6,793.37 | 105.52 | -500.74 | 511.74 | 281.90 |
| 6,916.00 | 4.04 | 282.77 | 6,887.08 | 107.01 | -507.94 | 519.09 | 281.90 |
| 7,011.00 | 1.43 | 293.90 | 6,981.97 | 108.23 | -512.29 | 523.60 | 281.93 |
| 7,105.00 | 1.25 | 299.56 | 7,075.94 | 109.21 | -514.25 | 525.72 | 281.99 |
| 7,200.00 | 1.19 | 281.21 | 7,170.92 | 109.91 | -516.12 | 527.69 | 282.02 |
| 7,294.00 | 1.03 | 278.63 | 7,264.90 | 110.23 | -517.91 | 529.51 | 282.02 |
| 7,389.00 | 1.31 | 273.77 | 7,359.88 | 110.43 | -519.84 | 531.44 | 281.99 |
| 7,483.00 | 0.94 | 261.98 | 7,453.87 | 110.39 | -521.68 | 533.23 | 281.95 |
| 7,577.00 | 0.75 | 220.40 | 7,547.86 | 109.82 | -522.84 | 534.25 | 281.86 |
| 7,672.00 | 0.66 | 257.13 | 7,642.85 | 109.22 | -523.78 | 535.04 | 281.78 |
| 7,767.00 | 0.71 | 274.65 | 7,737.84 | 109.15 | -524.90 | 536.12 | 281.75 |
| 7,861.00 | 0.78 | 257.52 | 7,831.83 | 109.06 | -526.10 | 537.29 | 281.71 |
| 7,956.00 | 0.68 | 233.57 | 7,926.83 | 108.58 | -527.19 | 538.25 | 281.64 |
| 8,050.00 | 0.57 | 241.27 | 8,020.82 | 108.03 | -528.04 | 538.98 | 281.56 |
| 8,145.00 | 0.91 | 231.58 | 8,115.81 | 107.33 | -529.05 | 539.83 | 281.47 |
| 8,239.00 | 1.26 | 223.97 | 8,209.80 | 106.12 | -530.35 | 540.87 | 281.32 |
| 8,334.00 | 1.25 | 222.18 | 8,304.77 | 104.60 | -531.77 | 541.96 | 281.13 |
| 8,429.00 | 1.20 | 228.19 | 8,399.75 | 103.17 | -533.21 | 543.10 | 280.95 |
| 8,523.00 | 1.21 | 228.45 | 8,493.73 | 101.86 | -534.69 | 544.30 | 280.79 |
| 8,618.00 | 1.30 | 234.51 | 8,588.71 | 100.57 | -536.32 | 545.66 | 280.62 |
| 8,712.00 | 1.26 | 245.88 | 8,682.69 | 99.52 | -538.13 | 547.25 | 280.48 |
| 8,806.00 | 1.01 | 231.60 | 8,776.67 | 98.59 | -539.72 | 548.65 | 280.35 |
| 8,901.00 | 1.00 | 234.11 | 8,871.65 | 97.58 | -541.05 | 549.78 | 280.22 |
| 8,995.00 | 0.61 | 251.09 | 8,965.64 | 96.94 | -542.18 | 550.78 | 280.14 |
| 9,090.00 | 1.11 | 251.94 | 9,060.63 | 96.49 | -543.54 | 552.04 | 280.07 |
| 9,185.00 | 1.73 | 257.23 | 9,155.60 | 95.89 | -545.81 | 554.17 | 279.96 |
| 9,279.00 | 0.82 | 288.64 | 9,249.58 | 95.79 | -547.83 | 556.14 | 279.92 |
| 9,374.00 | 0.86 | 278.41 | 9,344.57 | 96.11 | -549.18 | 557.53 | 279.93 |
| 9,468.00 | 2.14 | 295.26 | 9,438.54 | 96.96 | -551.47 | 559.93 | 279.97 |
| 9,544.52 | 2.19 | 314.30 | 9,515.00 | 98.59 | -553.81 | 562.51 | 280.09 |
| 9515' TVD - 215' FNL | | | | | | | |
| 9,563.00 | 2.24 | 318.62 | 9,533.47 | 99.11 | -554.30 | 563.09 | 280.14 |
| 9,658.00 | 0.79 | 336.11 | 9,628.43 | 101.10 | -555.79 | 564.91 | 280.31 |
| 9,752.00 | 0.59 | 356.19 | 9,722.43 | 102.18 | -556.09 | 565.40 | 280.41 |
| 9,847.00 | 0.30 | 310.74 | 9,817.42 | 102.83 | -556.31 | 565.73 | 280.47 |
| 9,941.00 | 1.36 | 82.12 | 9,911.42 | 103.14 | -555.39 | 564.88 | 280.52 |
| 10,035.00 | 2.02 | 79.23 | 10,005.37 | 103.61 | -552.66 | 562.28 | 280.62 |
| 10,129.00 | 1.70 | 65.04 | 10,099.32 | 104.50 | -549.76 | 559.61 | 280.76 |
| 10,223.00 | 1.09 | 59.82 | 10,193.30 | 105.54 | -547.73 | 557.80 | 280.91 |

| | | | |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| Company: | Continental Resources | Local Co-ordinate Reference: | Well UTL War University 2324I #2209H |
| Project: | Ward Co., TX (NAD-27) | TVD Reference: | KB=27 @ 2846.00usft |
| Site: | UTL War University Pad | MD Reference: | KB=27 @ 2846.00usft |
| Well: | UTL War University 2324I #2209H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Dusty Moyer Local |

| Survey | | | | | | | | |
|--|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (°) | |
| 10,317.00 | 0.85 | 76.80 | 10,287.28 | 106.15 | -546.28 | 556.49 | 281.00 | |
| 10,411.00 | 0.41 | 157.15 | 10,381.28 | 106.00 | -545.47 | 555.67 | 281.00 | |
| 10,505.00 | 0.60 | 229.69 | 10,475.28 | 105.37 | -545.71 | 555.79 | 280.93 | |
| 10,571.00 | 0.58 | 240.10 | 10,541.27 | 104.98 | -546.26 | 556.26 | 280.88 | |
| 10,600.00 | 0.52 | 254.53 | 10,570.27 | 104.87 | -546.52 | 556.49 | 280.86 | |
| 10,694.00 | 0.51 | 232.02 | 10,664.27 | 104.50 | -547.26 | 557.15 | 280.81 | |
| 10,779.74 | 0.50 | 254.95 | 10,750.00 | 104.17 | -547.92 | 557.73 | 280.76 | |
| 10750' TVD - 212' FNL | | | | | | | | |
| 10,789.00 | 0.50 | 257.41 | 10,759.26 | 104.15 | -548.00 | 557.81 | 280.76 | |
| 10,883.00 | 0.77 | 292.63 | 10,853.26 | 104.31 | -548.98 | 558.80 | 280.76 | |
| 10,978.00 | 1.68 | 309.86 | 10,948.24 | 105.44 | -550.64 | 560.64 | 280.84 | |
| 11,072.00 | 1.08 | 256.83 | 11,042.21 | 106.12 | -552.56 | 562.66 | 280.87 | |
| 11,091.00 | 1.15 | 242.47 | 11,061.21 | 106.00 | -552.90 | 562.97 | 280.85 | |
| 11,278.00 | 2.16 | 330.15 | 11,248.15 | 108.19 | -556.32 | 566.74 | 281.00 | |
| 11,326.00 | 9.93 | 345.04 | 11,295.85 | 112.97 | -557.84 | 569.17 | 281.45 | |
| Cross 200' FNL - 11326' MD - 11295.85' TVD | | | | | | | | |
| 11,372.00 | 17.45 | 346.81 | 11,340.51 | 123.54 | -560.44 | 573.90 | 282.43 | |
| 11,467.00 | 31.91 | 348.26 | 11,426.60 | 162.19 | -568.85 | 591.52 | 285.91 | |
| 11,561.00 | 45.27 | 348.42 | 11,499.91 | 219.49 | -580.66 | 620.76 | 290.71 | |
| 11,655.00 | 61.91 | 348.96 | 11,555.51 | 293.41 | -595.40 | 663.78 | 296.23 | |
| 11,675.00 | 62.35 | 349.06 | 11,564.86 | 310.77 | -598.77 | 674.62 | 297.43 | |
| Cross Section Line @ 11675' | | | | | | | | |
| 11,750.00 | 64.01 | 349.44 | 11,598.70 | 376.53 | -611.26 | 717.92 | 301.63 | |
| 11,787.00 | 69.57 | 347.36 | 11,613.27 | 409.82 | -618.10 | 741.62 | 303.55 | |
| Cross 100' Hardline @ 11787' | | | | | | | | |
| 11,844.00 | 78.18 | 344.42 | 11,629.09 | 462.86 | -631.47 | 782.94 | 306.24 | |
| 11,939.00 | 86.24 | 346.56 | 11,641.96 | 553.91 | -655.01 | 857.82 | 310.22 | |
| 12,033.00 | 89.29 | 347.33 | 11,645.62 | 645.40 | -676.23 | 934.78 | 313.66 | |
| 12,128.00 | 87.50 | 345.52 | 11,648.29 | 737.70 | -698.51 | 1,015.93 | 316.56 | |
| 12,222.00 | 90.52 | 347.20 | 11,649.91 | 829.02 | -720.67 | 1,098.47 | 319.00 | |
| 12,317.00 | 88.11 | 347.49 | 11,651.04 | 921.70 | -741.48 | 1,182.93 | 321.18 | |
| 12,411.00 | 88.47 | 347.03 | 11,653.85 | 1,013.34 | -762.20 | 1,268.00 | 323.05 | |
| 12,506.00 | 87.94 | 346.37 | 11,656.83 | 1,105.75 | -784.05 | 1,355.51 | 324.66 | |
| 12,600.00 | 89.40 | 344.61 | 11,659.01 | 1,196.72 | -807.59 | 1,443.73 | 325.99 | |
| 12,695.00 | 89.43 | 343.24 | 11,659.98 | 1,288.00 | -833.90 | 1,534.38 | 327.08 | |
| 12,791.00 | 87.83 | 342.92 | 11,662.27 | 1,379.81 | -861.83 | 1,626.85 | 328.01 | |
| 12,886.00 | 87.50 | 341.66 | 11,666.14 | 1,470.23 | -890.70 | 1,718.99 | 328.79 | |
| 12,958.00 | 87.86 | 341.29 | 11,669.06 | 1,538.45 | -913.56 | 1,789.25 | 329.30 | |
| 13,052.00 | 88.08 | 345.80 | 11,672.39 | 1,628.52 | -940.16 | 1,880.42 | 330.00 | |
| 13,147.00 | 89.09 | 348.02 | 11,674.74 | 1,721.01 | -961.67 | 1,971.47 | 330.80 | |
| 13,241.00 | 88.92 | 348.78 | 11,676.37 | 1,813.08 | -980.56 | 2,061.25 | 331.59 | |
| 13,335.00 | 88.81 | 347.17 | 11,678.23 | 1,905.00 | -1,000.14 | 2,151.58 | 332.30 | |
| 13,429.00 | 88.30 | 344.86 | 11,680.60 | 1,996.17 | -1,022.85 | 2,242.97 | 332.87 | |
| 13,523.00 | 89.23 | 340.70 | 11,682.63 | 2,085.92 | -1,050.67 | 2,335.59 | 333.27 | |
| 13,617.00 | 88.87 | 339.54 | 11,684.19 | 2,174.30 | -1,082.63 | 2,428.92 | 333.53 | |

| | | | |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| Company: | Continental Resources | Local Co-ordinate Reference: | Well UTL War University 2324I #2209H |
| Project: | Ward Co., TX (NAD-27) | TVD Reference: | KB=27 @ 2846.00usft |
| Site: | UTL War University Pad | MD Reference: | KB=27 @ 2846.00usft |
| Well: | UTL War University 2324I #2209H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Dusty Moyer Local |

| Survey | | | | | | | | |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (°) | |
| 13,712.00 | 89.20 | 339.67 | 11,685.79 | 2,263.33 | -1,115.73 | 2,523.40 | 333.76 | |
| 13,807.00 | 89.09 | 340.85 | 11,687.20 | 2,352.74 | -1,147.81 | 2,617.80 | 333.99 | |
| 13,901.00 | 89.20 | 342.42 | 11,688.61 | 2,441.94 | -1,177.42 | 2,710.98 | 334.26 | |
| 13,996.00 | 89.12 | 342.66 | 11,690.00 | 2,532.55 | -1,205.92 | 2,805.01 | 334.54 | |
| 14,090.00 | 89.15 | 342.32 | 11,691.42 | 2,622.19 | -1,234.20 | 2,898.12 | 334.79 | |
| 14,184.00 | 89.34 | 341.49 | 11,692.66 | 2,711.53 | -1,263.40 | 2,991.42 | 335.02 | |
| 14,278.00 | 89.09 | 342.14 | 11,693.94 | 2,800.83 | -1,292.73 | 3,084.77 | 335.22 | |
| 14,373.00 | 88.67 | 341.99 | 11,695.80 | 2,891.19 | -1,321.98 | 3,179.09 | 335.43 | |
| 14,467.00 | 88.11 | 342.99 | 11,698.44 | 2,980.80 | -1,350.25 | 3,272.36 | 335.63 | |
| 14,561.00 | 86.59 | 341.41 | 11,702.79 | 3,070.20 | -1,378.95 | 3,365.65 | 335.81 | |
| 14,656.00 | 87.60 | 341.78 | 11,707.60 | 3,160.22 | -1,408.91 | 3,460.06 | 335.97 | |
| 14,751.00 | 87.58 | 343.28 | 11,711.60 | 3,250.76 | -1,437.40 | 3,554.37 | 336.15 | |
| 14,845.00 | 87.91 | 341.77 | 11,715.30 | 3,340.35 | -1,465.60 | 3,647.73 | 336.31 | |
| 14,939.00 | 87.60 | 342.00 | 11,718.98 | 3,429.62 | -1,494.81 | 3,741.22 | 336.45 | |
| 15,033.00 | 87.66 | 344.86 | 11,722.87 | 3,519.63 | -1,521.59 | 3,834.45 | 336.62 | |
| 15,127.00 | 87.55 | 345.22 | 11,726.80 | 3,610.36 | -1,545.83 | 3,927.38 | 336.82 | |
| 15,221.00 | 87.80 | 345.69 | 11,730.61 | 3,701.28 | -1,569.42 | 4,020.26 | 337.02 | |
| 15,316.00 | 89.09 | 345.66 | 11,733.19 | 3,793.29 | -1,592.92 | 4,114.17 | 337.22 | |
| 15,410.00 | 88.92 | 347.91 | 11,734.82 | 3,884.78 | -1,614.40 | 4,206.87 | 337.43 | |
| 15,504.00 | 89.43 | 347.08 | 11,736.17 | 3,976.54 | -1,634.75 | 4,299.45 | 337.65 | |
| 15,599.00 | 89.06 | 344.86 | 11,737.43 | 4,068.69 | -1,657.78 | 4,393.46 | 337.83 | |
| 15,693.00 | 88.89 | 345.46 | 11,739.11 | 4,159.54 | -1,681.85 | 4,486.69 | 337.98 | |
| 15,787.00 | 89.26 | 346.13 | 11,740.62 | 4,250.65 | -1,704.92 | 4,579.82 | 338.14 | |
| 15,882.00 | 89.43 | 344.08 | 11,741.71 | 4,342.45 | -1,729.33 | 4,674.13 | 338.29 | |
| 15,977.00 | 89.71 | 342.63 | 11,742.42 | 4,433.46 | -1,756.54 | 4,768.76 | 338.39 | |
| 16,071.00 | 89.09 | 341.93 | 11,743.41 | 4,523.00 | -1,785.15 | 4,862.54 | 338.46 | |
| 16,166.00 | 89.68 | 343.54 | 11,744.43 | 4,613.71 | -1,813.34 | 4,957.27 | 338.54 | |
| 16,260.00 | 89.65 | 345.81 | 11,744.98 | 4,704.36 | -1,838.19 | 5,050.73 | 338.66 | |
| 16,355.00 | 89.59 | 344.85 | 11,745.61 | 4,796.26 | -1,862.24 | 5,145.10 | 338.78 | |
| 16,450.00 | 89.68 | 341.39 | 11,746.21 | 4,887.15 | -1,889.82 | 5,239.82 | 338.86 | |
| 16,545.00 | 90.55 | 340.99 | 11,746.02 | 4,977.07 | -1,920.45 | 5,334.74 | 338.90 | |
| 16,639.00 | 89.82 | 339.25 | 11,745.72 | 5,065.47 | -1,952.42 | 5,428.71 | 338.92 | |
| 16,734.00 | 89.65 | 341.24 | 11,746.16 | 5,154.87 | -1,984.53 | 5,523.68 | 338.94 | |
| 16,828.00 | 87.91 | 335.85 | 11,748.16 | 5,242.30 | -2,018.88 | 5,617.62 | 338.94 | |
| 16,922.00 | 89.51 | 341.87 | 11,750.28 | 5,329.91 | -2,052.76 | 5,711.55 | 338.94 | |
| 17,017.00 | 89.79 | 342.02 | 11,750.86 | 5,420.23 | -2,082.20 | 5,806.42 | 338.99 | |
| 17,112.00 | 87.15 | 342.31 | 11,753.40 | 5,510.63 | -2,111.29 | 5,901.23 | 339.04 | |
| 17,206.00 | 88.84 | 344.97 | 11,756.68 | 5,600.75 | -2,137.74 | 5,994.86 | 339.11 | |
| 17,300.00 | 89.01 | 347.69 | 11,758.45 | 5,692.07 | -2,159.95 | 6,088.10 | 339.22 | |
| 17,395.00 | 89.45 | 347.87 | 11,759.72 | 5,784.91 | -2,180.06 | 6,182.05 | 339.35 | |
| 17,489.00 | 88.36 | 344.59 | 11,761.52 | 5,876.17 | -2,202.42 | 6,275.36 | 339.45 | |
| 17,584.00 | 89.26 | 341.60 | 11,763.50 | 5,967.04 | -2,230.04 | 6,370.13 | 339.51 | |
| 17,678.00 | 89.62 | 341.63 | 11,764.41 | 6,056.24 | -2,259.69 | 6,464.07 | 339.54 | |
| 17,772.00 | 91.58 | 343.34 | 11,763.43 | 6,145.86 | -2,287.97 | 6,557.93 | 339.58 | |

| | | | |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| Company: | Continental Resources | Local Co-ordinate Reference: | Well UTL War University 2324I #2209H |
| Project: | Ward Co., TX (NAD-27) | TVD Reference: | KB=27 @ 2846.00usft |
| Site: | UTL War University Pad | MD Reference: | KB=27 @ 2846.00usft |
| Well: | UTL War University 2324I #2209H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Dusty Moyer Local |

| Survey | | | | | | | | |
|--------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (°) | |
| 17,867.00 | 91.05 | 342.29 | 11,761.25 | 6,236.60 | -2,316.03 | 6,652.76 | 339.63 | |
| 17,962.00 | 91.44 | 341.97 | 11,759.19 | 6,326.99 | -2,345.18 | 6,747.64 | 339.66 | |
| 18,057.00 | 92.00 | 343.60 | 11,756.33 | 6,417.69 | -2,373.28 | 6,842.46 | 339.71 | |
| 18,150.00 | 89.37 | 341.58 | 11,755.22 | 6,506.41 | -2,401.10 | 6,935.32 | 339.74 | |
| 18,245.00 | 89.87 | 341.20 | 11,755.85 | 6,596.44 | -2,431.42 | 7,030.28 | 339.77 | |
| 18,339.00 | 89.62 | 341.21 | 11,756.27 | 6,685.43 | -2,461.70 | 7,124.25 | 339.79 | |
| 18,433.00 | 89.43 | 343.43 | 11,757.05 | 6,774.98 | -2,490.25 | 7,218.15 | 339.82 | |
| 18,528.00 | 89.59 | 344.88 | 11,757.86 | 6,866.37 | -2,516.18 | 7,312.88 | 339.87 | |
| 18,622.00 | 89.62 | 344.15 | 11,758.51 | 6,956.95 | -2,541.28 | 7,406.57 | 339.93 | |
| 18,717.00 | 90.01 | 343.74 | 11,758.82 | 7,048.25 | -2,567.55 | 7,501.34 | 339.98 | |
| 18,811.00 | 90.35 | 343.78 | 11,758.52 | 7,138.49 | -2,593.84 | 7,595.14 | 340.03 | |
| 18,906.00 | 89.57 | 344.36 | 11,758.59 | 7,229.84 | -2,619.91 | 7,689.90 | 340.08 | |
| 19,000.00 | 89.62 | 346.07 | 11,759.25 | 7,320.73 | -2,643.90 | 7,783.52 | 340.14 | |
| 19,094.00 | 90.57 | 346.37 | 11,759.10 | 7,412.02 | -2,666.29 | 7,877.00 | 340.22 | |
| 19,189.00 | 90.71 | 347.56 | 11,758.04 | 7,504.56 | -2,687.71 | 7,971.34 | 340.30 | |
| 19,283.00 | 88.42 | 345.62 | 11,758.75 | 7,595.99 | -2,709.51 | 8,064.77 | 340.37 | |
| 19,378.00 | 88.92 | 344.30 | 11,760.95 | 7,687.71 | -2,734.16 | 8,159.44 | 340.42 | |
| 19,472.00 | 88.36 | 343.32 | 11,763.19 | 7,777.95 | -2,760.36 | 8,253.25 | 340.46 | |
| 19,566.00 | 88.75 | 344.72 | 11,765.56 | 7,868.29 | -2,786.23 | 8,347.04 | 340.50 | |
| 19,661.00 | 89.06 | 344.04 | 11,767.37 | 7,959.76 | -2,811.80 | 8,441.80 | 340.54 | |
| 19,755.00 | 89.34 | 344.35 | 11,768.68 | 8,050.20 | -2,837.40 | 8,535.61 | 340.58 | |
| 19,850.00 | 88.50 | 342.54 | 11,770.47 | 8,141.24 | -2,864.46 | 8,630.47 | 340.62 | |
| 19,944.00 | 88.95 | 343.17 | 11,772.57 | 8,231.04 | -2,892.17 | 8,724.37 | 340.64 | |
| 20,039.00 | 89.06 | 344.44 | 11,774.22 | 8,322.26 | -2,918.66 | 8,819.21 | 340.67 | |
| 20,133.00 | 89.23 | 344.42 | 11,775.62 | 8,412.80 | -2,943.89 | 8,913.00 | 340.71 | |
| 20,228.00 | 89.06 | 343.30 | 11,777.04 | 8,504.04 | -2,970.29 | 9,007.85 | 340.75 | |
| 20,322.00 | 88.61 | 343.71 | 11,778.95 | 8,594.15 | -2,996.98 | 9,101.72 | 340.78 | |
| 20,417.00 | 89.09 | 343.64 | 11,780.85 | 8,685.30 | -3,023.67 | 9,196.58 | 340.81 | |
| 20,511.00 | 89.17 | 344.77 | 11,782.28 | 8,775.74 | -3,049.26 | 9,290.41 | 340.84 | |
| 20,606.00 | 89.01 | 344.39 | 11,783.79 | 8,867.31 | -3,074.51 | 9,385.19 | 340.88 | |
| 20,700.00 | 89.26 | 343.78 | 11,785.21 | 8,957.70 | -3,100.29 | 9,479.04 | 340.91 | |
| 20,795.00 | 88.81 | 343.01 | 11,786.81 | 9,048.72 | -3,127.43 | 9,573.93 | 340.93 | |
| 20,889.00 | 89.37 | 343.61 | 11,788.30 | 9,138.75 | -3,154.42 | 9,667.84 | 340.96 | |
| 20,984.00 | 90.35 | 344.17 | 11,788.53 | 9,230.02 | -3,180.78 | 9,762.72 | 340.99 | |
| 21,078.00 | 90.55 | 344.74 | 11,787.80 | 9,320.58 | -3,205.97 | 9,856.54 | 341.02 | |
| 21,173.00 | 90.07 | 344.00 | 11,787.28 | 9,412.06 | -3,231.57 | 9,951.38 | 341.05 | |
| 21,267.00 | 89.93 | 342.38 | 11,787.28 | 9,502.04 | -3,258.75 | 10,045.31 | 341.07 | |
| 21,362.00 | 90.32 | 343.20 | 11,787.07 | 9,592.79 | -3,286.86 | 10,140.27 | 341.09 | |
| 21,456.00 | 91.05 | 343.65 | 11,785.95 | 9,682.87 | -3,313.67 | 10,234.18 | 341.11 | |
| 21,551.00 | 91.11 | 344.33 | 11,784.16 | 9,774.17 | -3,339.87 | 10,329.04 | 341.13 | |
| 21,646.00 | 91.05 | 344.01 | 11,782.37 | 9,865.55 | -3,365.78 | 10,423.90 | 341.16 | |
| 21,740.00 | 91.19 | 344.06 | 11,780.53 | 9,955.91 | -3,391.63 | 10,517.76 | 341.19 | |
| 21,834.00 | 91.16 | 344.22 | 11,778.60 | 10,046.31 | -3,417.31 | 10,611.62 | 341.21 | |
| 21,929.00 | 91.08 | 343.90 | 11,776.75 | 10,137.64 | -3,443.40 | 10,706.48 | 341.24 | |

| | | | |
|------------------|---------------------------------|-------------------------------------|--------------------------------------|
| Company: | Continental Resources | Local Co-ordinate Reference: | Well UTL War University 2324I #2209H |
| Project: | Ward Co., TX (NAD-27) | TVD Reference: | KB=27 @ 2846.00usft |
| Site: | UTL War University Pad | MD Reference: | KB=27 @ 2846.00usft |
| Well: | UTL War University 2324I #2209H | North Reference: | Grid |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Dusty Moyer Local |

| Survey | | | | | | | | |
|---------------------|------------|----------------------|---------------|---------------|---------------|----------------------------|------------------------|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | Closure Distance (usft) | Closure Azimuth (°) | |
| 22,023.00 | 91.05 | 344.29 | 11,775.00 | 10,228.03 | -3,469.15 | 10,800.35 | 341.26 | |
| 22,118.00 | 91.05 | 344.14 | 11,773.26 | 10,319.43 | -3,494.99 | 10,895.21 | 341.29 | |
| 22,126.00 | 90.85 | 344.20 | 11,773.13 | 10,327.13 | -3,497.17 | 10,903.20 | 341.29 | |
| Last Survey | | | | | | | | |
| 22,162.00 | 90.85 | 344.20 | 11,772.59 | 10,361.76 | -3,506.98 | 10,939.15 | 341.30 | |
| PTB @ 22162' | | | | | | | | |

| Survey Annotations | | | | | |
|-----------------------------|-----------------------------|-------------------|-----------------|--|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | | |
| | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 1,259.00 | 1,258.92 | 1.14 | 1.39 | First AEP Survey | |
| 9,544.52 | 9,515.00 | 98.59 | -553.81 | 9515' TVD - 215' FNL | |
| 10,779.74 | 10,750.00 | 104.17 | -547.92 | 10750' TVD - 212' FNL | |
| 11,326.00 | 11,295.85 | 112.97 | -557.84 | Cross 200' FNL - 11326' MD - 11295.85' TVD | |
| 11,675.00 | 11,564.86 | 310.77 | -598.77 | Cross Section Line @ 11675' | |
| 11,787.00 | 11,613.27 | 409.82 | -618.10 | Cross 100' Hardline @ 11787' | |
| 22,126.00 | 11,773.13 | 10,327.13 | -3,497.17 | Last Survey | |
| 22,162.00 | 11,772.59 | 10,361.76 | -3,506.98 | PTB @ 22162' | |

| | | |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|



ALTITUDE ENERGY PARTNERS LLC. SURVEY DATA CERTIFICATION

| | | | | | | |
|---------------------|--|--|-----------|----------------|--------------------|--|
| ALTITUDE JOB NUMBER | | | | OPERATOR | | |
| WELL NAME | | | | COUNTY & STATE | | |
| API WELL NUMBER | | | | | PROPOSED DIRECTION | |
| Latitude | | | Longitude | | | |

| | | | | | | |
|--------------------------------|---------------------------------|--------|---------|------------------------------------|----------------------------------|----------------|
| TIE-IN DATA | | | | | | |
| MEASURED DEPTH | VERTICAL DEPTH | INCLIN | AZIMUTH | N-S COORD | E-W COORD | DATA SOURCE |
| | | | | | | |
| FIRST SURVEY DATE | FIRST SURVEY DEPTH | INCLIN | AZIMUTH | | SURVEY INSTRUMENT TYPE MWD | |
| | | | | MAGNETIC DECLINATION OR TOTAL GRID | | |
| LAST SURVEY DATE | LAST SURVEY DEPTH | INCLIN | AZIMUTH | TOTAL CORRECTION USED | | |
| | | | | DECLINATION OR GRID | | |
| PROJECTED TD SURVEY DATE | PROJECTED TD SURVEY DEPTH | INCLIN | AZIMUTH | | | |
| | | | | | | |

The data and calculations for this survey have been checked by me and conform to the calibration standards and operational procedures set forth by Altitude Energy Partners LLC. I am authorized and qualified to review the data, calculations and this report, and that the report represents a true and correct Directional Survey of this well based on the original data corrected to True North and obtained at the well site. Wellbore coordinates are calculated using Minimum curvature or other method.

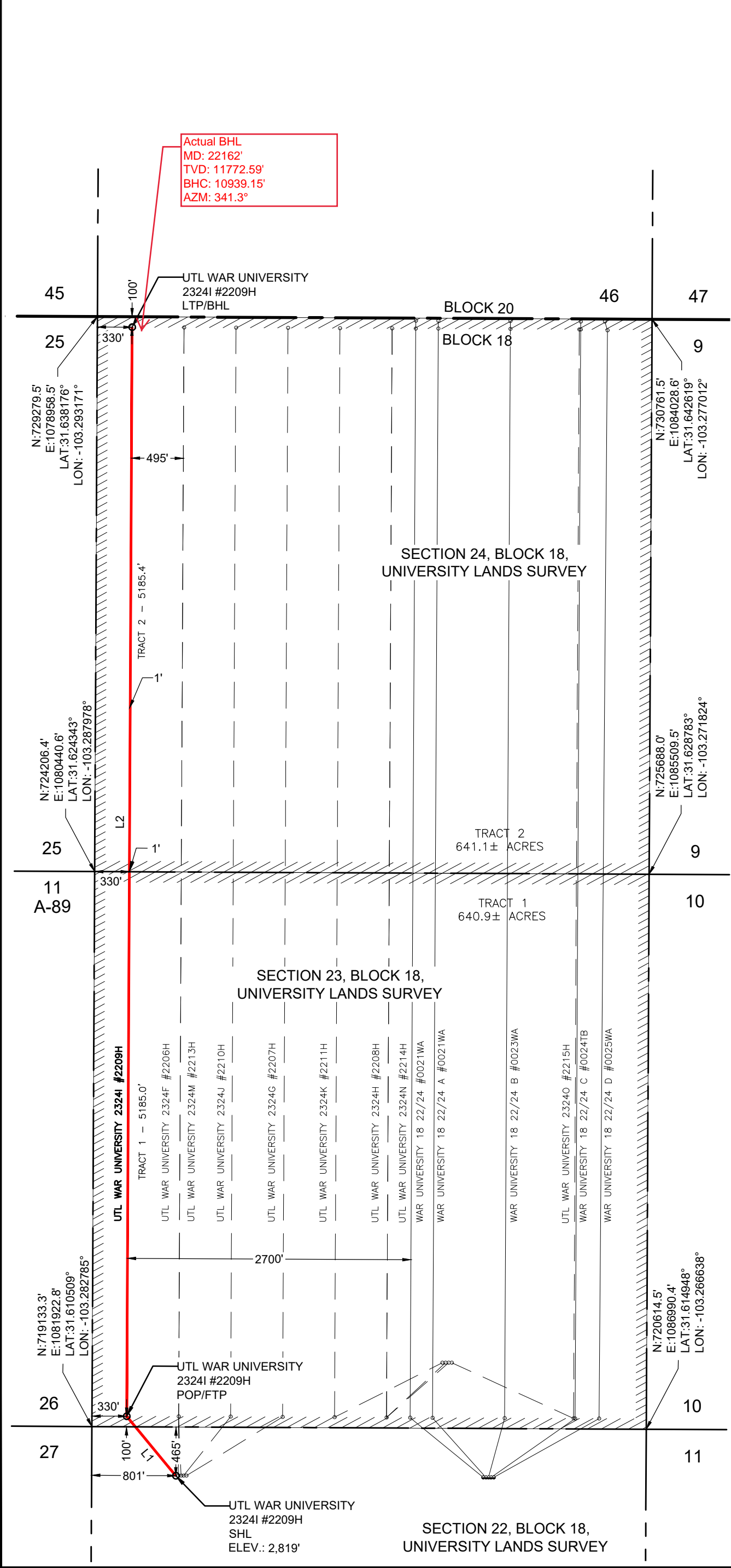
PRINT MWD NAME ABOVE

Jose Castaneda

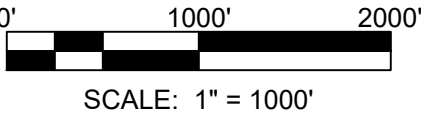
SIGN MWD NAME ABOVE

TODAY'S DATE

| UTL WAR UNIVERSITY 2324I #2209H | EASTING (X) | NORTHING (Y) | LATITUDE | LONGITUDE | SECTION LINE | | SECTION LINE | | LEASE LINE | | LEASE LINE | | SECTION |
|--|-------------|--------------|-----------|-------------|--------------|---------|--------------|---------|------------|---------|------------|---------|---------|
| | | | | | FOOTAGE | FNL/FSL | FOOTAGE | FEL/FWL | FOOTAGE | FNL/FSL | FOOTAGE | FEL/FWL | |
| SURFACE HOLE LOCATION (SHL) | 1082822.0 | 718911.8 | 31.609966 | -103.279879 | 465' | FNL | 801' | FWL | 465' | FNL | 801' | FWL | 22 |
| POINT OF PENETRATION/FIRST TAKE POINT (POP/FTP) | 1082211.5 | 719321.9 | 31.611048 | -103.281874 | 100' | FSL | 330' | FWL | 100' | FSL | 330' | FWL | 23 |
| LAST TAKE POINT/BOTTOM HOLE LOCATION (LTP/BHL) | 1079303.2 | 729276.1 | 31.638192 | -103.292064 | 100' | FNL | 330' | FWL | 100' | FNL | 330' | FWL | 24 |



| LINE | BEARING | DISTANCE |
|-------|---------------|----------|
| L1 | N 56°06'50" W | 735.4' |
| L2 | N 16°17'11" W | 10370.4' |
| TOTAL | | 11105.8' |



NOTE: WELL IS LOCATED APPROXIMATELY 10.5 MILES NORTHWEST OF PYOTE, WARD COUNTY, TEXAS

3300 NORTH A STREET, BUILDING 2, SUITE 120
MIDLAND, TX 79705-5471
TEL (432) 253-3255
TBPELS SURVEYING FIRM #10193998

DATE: 5/23/2022
BY: K. RIOS
AVO: 046846.014

LEGEND

- SECTION LINE
- BLOCK LINE
- LEASE LINE
- SUBJECT LATERAL
- AS-DRILLED LATERAL
- PERMITTED LATERAL
- PROPOSED LATERAL
- PROPOSED WELL
- EXISTING WELL

NOTES:

- THE BASIS OF BEARING OF THE SURVEY IS THE TEXAS COORDINATE SYSTEM, NORTH AMERICAN DATUM 1927 (NAD 27), CENTRAL ZONE (4203).
- ALL TEXAS STATE PLANE COORDINATES AND GEOGRAPHIC COORDINATES SHOWN HEREON ARE NAD 27 GRID COORDINATES AS COMPUTED BY CORPSCON VERSION 6.0.1. ALL GEOGRAPHIC COORDINATES SHOWN HEREON WERE CONVERTED USING CORPSCON VERSION 6.0.1. UNLESS OTHERWISE NOTED, ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES AND THEY CAN BE CONVERTED TO SURFACE WHEN MULTIPLIED WITH A "SURFACE ADJUSTMENT FACTOR" OF 1.000191647, AS CALCULATED BY CORPSCON.
- ELEVATIONS SHOWN HEREON ARE NAVD88 AS DERIVED BY GPS.
- THIS EXHIBIT IS FOR TEXAS RAILROAD COMMISSION WELL PERMITTING PURPOSES ONLY. BOUNDARY LINES AND ACREAGE SHOWN HEREON REFLECT THE SURVEYORS PROFESSIONAL OPINION OF MINERAL RIGHTS AS DETERMINED FROM CLIENT-PROVIDED OIL AND GAS MINERAL LEASE DOCUMENTATION. THE INFORMATION DEPICTED HEREON SHALL NOT BE USED IN THE CONVEYANCE OF FEE TITLE TO REAL PROPERTY.
- ALL MEASUREMENTS TO LEASE, UNIT, AND SURVEY LINES ARE PERPENDICULAR TO SAID LINES.
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT.

CONTINENTAL RESOURCES, INC.

PERMIT PLAT

UTL WAR UNIVERSITY 2324I #2209H

TRACT 1 - 640.9± ACRES
TRACT 2 - 641.1± ACRES
TOTAL ACREAGE - 1282.0± ACRES
(SURFACE AREA)

SECTION 22, BLOCK 18, UNIVERSITY LANDS SURVEY,
SECTION 23, BLOCK 18, UNIVERSITY LANDS SURVEY
&
SECTION 24, BLOCK 18, UNIVERSITY LANDS SURVEY,
WARD COUNTY, TEXAS