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| API No. <u>42-003-47556</u> | RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION | | | | FORM W-1 07/2004 | |
| Drilling Permit # <u>840640</u> | APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER | | | | Permit Status: Approved | |
| SWR Exception Case/Docket No. <u>0311808 (R37)</u> | <i>This facsimile W-1 was generated electronically from data submitted to the RRC. A certification of the automated data is available in the RRC's Austin office.</i> | | | | | |
| 1. RRC Operator No. 950523 | 2. Operator's Name (as shown on form P-5, Organization Report) ZARVONA ENERGY LLC | | 3. Operator Address (include street, city, state, zip): 1010 LAMAR ST SUITE 500 HOUSTON, TX 77002-6334 | | | |
| 4. Lease Name ULS 5-9 UNIT | | 5. Well No. 6H | | | | |
| GENERAL INFORMATION | | | | | | |
| 6. Purpose of filing (mark ALL appropriate boxes): <input type="checkbox"/> New Drill <input checked="" type="checkbox"/> Recompletion <input type="checkbox"/> Reclass <input type="checkbox"/> Field Transfer <input type="checkbox"/> Re-Enter <input type="checkbox"/> Amended <input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D) | | | | | | |
| 7. Wellbore Profile (mark ALL appropriate boxes): <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Horizontal (Also File Form W-1H) <input type="checkbox"/> Directional (Also File Form W-1D) <input type="checkbox"/> Sidetrack | | | | | | |
| 8. Total Depth 15000 | | 9. Do you have the right to develop the minerals under any right-of-way ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | 10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| SURFACE LOCATION AND ACREAGE INFORMATION | | | | | | |
| 11. RRC District No. 08 | | 12. County ANDREWS | | 13. Surface Location <input checked="" type="checkbox"/> Land <input type="checkbox"/> Bay/Estuary <input type="checkbox"/> Inland Waterway <input type="checkbox"/> Offshore | | |
| 14. This well is to be located <u>16</u> miles in a <u>NE</u> direction from <u>Andrew</u> which is the nearest town in the county of the well site. | | | | | | |
| 15. Section 4 | 16. Block 5 | 17. Survey UL | | 18. Abstract No. A-U108 | 19. Distance to nearest lease line: 1 ft. | 20. Number of contiguous acres in lease, pooled unit, or unitized tract: 1280 |
| 21. Lease Perpendiculars: <u>467</u> ft from the <u>SOUTH</u> line and <u>467</u> ft from the <u>EAST</u> line. | | 22. Survey Perpendiculars: <u>467</u> ft from the <u>SOUTH</u> line and <u>467</u> ft from the <u>EAST</u> line. | | | | |
| 23. Is this a pooled unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | 24. Unitization Docket No: | | 25. Are you applying for Substandard Acreage Field? <input type="checkbox"/> Yes (attach Form W-1A) <input checked="" type="checkbox"/> No | | |
| FIELD INFORMATION List all fields of anticipated completion including Wildcat. List one zone per line. | | | | | | |
| 26. RRC District No. | 27. Field No. | 28. Field Name (exactly as shown in RRC records) | | 29. Well Type | 30. Completion Depth | 31. Distance to Nearest Well in this Reservoir |
| 08 | 28899581 | EMMA (MISSISSIPPIAN) | | Oil Well | 15000 | 0.00 |
| | | | | | | |
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| BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment) | | | | | | |
| Remarks See W1 Comments attached | | | | Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. <u>Alvaro Rosales, Regulatory Manager</u> <u>May 30, 2018</u> Name of filer Date submitted <u>(713)6000600</u> <u>arosales@zarvonaenergy.com</u> Phone E-mail Address (OPTIONAL) | | |
| RRC Use Only Data Validation Time Stamp: Jun 1, 2018 3:20 PM('As Approved' Version) | | | | | | |

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

Form W-1H 07/2004
Supplemental Horizontal Well Information

Permit Status: **Approved**
The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER

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A certification of the automated data is available in the RRC's Austin office.*

Permit # **840640**
Approved Date: **Jun 01, 2018**

| | | | |
|--------------------------------------|---|--------------------------------------|--------------------------|
| 1. RRC Operator No. 950523 | 2. Operator's Name (exactly as shown on form P-5, Organization Report) ZARVONA ENERGY LLC | 3. Lease Name ULS 5-9 UNIT | 4. Well No. 6H |
|--------------------------------------|---|--------------------------------------|--------------------------|

Lateral Drainhole Location Information

5. Field as shown on Form W-1 **EMMA (MISSISSIPPIAN) (Field # 28899581, RRC District 08)**

| | | | | |
|-------------------------|----------------------|---------------------------------|-------------|-------------------------------------|
| 6. Section 16 | 7. Block 5 | 8. Survey UL / A-U120 | 9. Abstract | 10. County of BHL ANDREWS |
|-------------------------|----------------------|---------------------------------|-------------|-------------------------------------|

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| 11. Terminus Lease Line Perpendiculars 100 ft. from the SOUTH line. and 330 ft. from the East line |
| 12. Terminus Survey Line Perpendiculars 100 ft. from the SOUTH line. and 330 ft. from the East line |
| 13. Penetration Point Lease Line Perpendiculars 467 ft. from the SOUTH line. and 467 ft. from the East line |

Permit Status: **Approved**
*The RRC has not approved this application.
Duplication or distribution of information is at
the user's own risk.*

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER

*This facsimile W-1 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.*

W-1 Comments

Permit # **840640**
Approved Date: **Jun 01, 2018**

[May 30, 2018 9:27 AM]: Commission Staff expresses no opinion as to whether a 100% ownership interest in each of the leases alone or in combination with a "production sharing agreement" confers the right to drill across lease/unit lines or whether a pooling agreement is also required. However, until that issue is directly addressed and ruled upon by a Texas court of competent jurisdiction it appears that a 100% interest in each of the leases and a production sharing agreement constitute a sufficient colorable claim to the right to drill a horizontal well as proposed to authorize the removal of the regulatory bar and the issuance of a drilling permit by the Commission, assuming the proposed well is in compliance with all other relevant Commission requirements.

Issuance of the permit is not an endorsement or approval of the applicant's stated method of allocating production proceeds among component leases or units. All production must be reported to the Commission as production from the lease or pooled unit on which the wellhead is located and reported production volume must be determined by actual measurement of hydrocarbon volumes prior to leaving that tract and may not be based on allocation or estimation. Payment of royalties is a contractual matter between the lessor and lessee. Interpreting the leases and determining whether the proposed proceeds allocation comports with the relevant leases is not a matter within Commission jurisdiction but a matter for the parties to the lease and, if necessary, a Texas court of competent jurisdiction.

The foregoing statements are not, and should not be construed as, a final opinion or decision of the Railroad Commission.; [FILER May 30, 2018 1:40 PM]: Changing producing vertical well to a horizontal; [RRC STAFF Jun 1, 2018 9:36 AM]: SHL marked as off-lease per plat. Nearest LL distance changed to 1' for this allocation. Terminus survey info corrected per plat and RRC GIS. LTP/BHL direction changed from 100' FEL to FSL and PP SL calls corrected per plat.; [RRC STAFF Jun 1, 2018 9:47 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Jun 1, 2018 10:40 AM]: Problems identified with this permit are resolved.; [RRC STAFF Jun 1, 2018 10:40 AM]: Revised plat and P-16 sent by Alvaro Rosales

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data**

ANDREWS (003) County

| Formation | Shallow Top | Deep Top | Remarks | Geological Order | Effective Date |
|---------------------|-------------|----------|---------------------------------------|------------------|----------------|
| YATES | 2,500 | 3,200 | | 1 | 12/17/2013 |
| SEVEN RIVERS | 3,000 | 3,000 | | 2 | 12/17/2013 |
| QUEEN | 3,600 | 4,800 | | 3 | 12/17/2013 |
| GRAYBURG | 3,100 | 5,000 | | 4 | 12/17/2013 |
| SAN ANDRES | 3,700 | 5,300 | CO2 flood, high flows, H2S, corrosive | 5 | 12/17/2013 |
| HOLT | 5,000 | 5,500 | | 6 | 12/17/2013 |
| GLORIETA | 5,100 | 6,000 | | 7 | 12/17/2013 |
| TUBB | 6,100 | 6,300 | | 8 | 12/17/2013 |
| CLEARFORK | 5,600 | 7,600 | | 9 | 12/17/2013 |
| PERMIAN DETRITAL | 7,800 | 7,900 | | 10 | 12/17/2013 |
| LEON | 7,900 | 7,900 | | 11 | 12/17/2013 |
| WICHITA ALBANY | 6,500 | 8,100 | | 12 | 12/17/2013 |
| SPRABERRY | 7,300 | 8,600 | | 13 | 12/17/2013 |
| DEAN | 9,200 | 9,500 | | 14 | 12/17/2013 |
| WOLFCAMP | 7,500 | 9,900 | | 15 | 12/17/2013 |
| CANYON | 8,600 | 10,200 | | 16 | 12/17/2013 |
| PENNSYLVANIAN | 8,700 | 10,200 | | 17 | 12/17/2013 |
| MCKEE | 8,300 | 10,600 | | 18 | 12/17/2013 |
| STRAWN | 8,800 | 11,000 | | 19 | 12/17/2013 |
| FUSSELMAN | 8,400 | 11,900 | | 20 | 12/17/2013 |
| DEVONIAN | 7,600 | 12,500 | | 21 | 12/17/2013 |
| SILURIAN | 8,000 | 12,500 | | 22 | 12/17/2013 |
| ELLENBURGER | 7,900 | 13,900 | | 23 | 12/17/2013 |

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. Formation "TOP" information listed reflects an estimated range based on geologic variances across the county. To clarify, the "Deep Top" is not the bottom of the formation; it is the deepest depth at which the "TOP" of the formation has been or might be encountered. This is a dynamic list subject to updates and revisions. It is the operator's responsibility to make sure that at the time of spudding the well the most current list is being referenced. Refer to the RRC website at the following address for the most recent information.
<http://www.rrc.texas.gov/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
 P.O. Box 12967
 Austin, Texas 78701-2967

Form P-16

Page 2

Rev. 01/2016

Acreage Designation

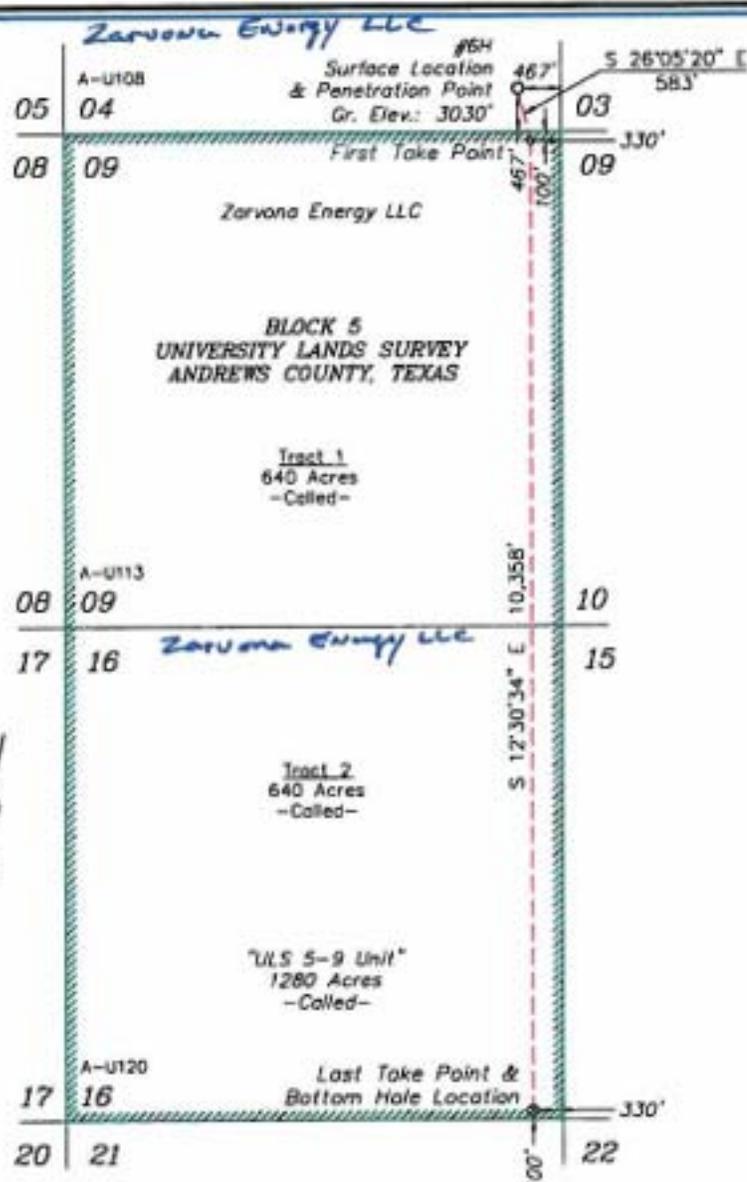
Filer is the owner or lessee of all or an undivided portion of the minerals under each tract listed below and has the legal right to drill on each tract traversed by the well that will have perforations or other take points open in the interval of the applied-for field(s). All tracts listed will actually be traversed by the wellbore or the filer has pooling authority or other contractual authority, such as a production sharing agreement, authorizing inclusion of the non-drillsite tract in the acreage assigned to the well.

| SECTION V. LISTING OF ALL TRACTS CONTRIBUTING ACREAGE TO AN RRC DESIGNATED DRILLSITE DEVELOPMENTAL UNIT THAT IS NOT A SINGLE LEASE, POOLED UNIT, OR GROUP OF TRACTS UNITIZED BY CONTRACT FOR PURPOSES OF SECONDARY RECOVERY | | | | | |
|---|--------------|-------------------------|-------------------------|----------------------|--|
| RRC ID No. or Lease No. | Lease Name | Beginning Lease Acreage | Allocated Lease Acreage | Ending Lease Acreage | Operator Name and Operator No. (if different from filing operator) |
| Tract 1 | ULS 5-9 Unit | 640 | 640 | 640 | |
| Tract 2 | ULS 5-9 Unit | 640 | 640 | 640 | |
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| | | | | | |
| Total Allocated Acreage > | | | 1280 | 1280 | < Total Lease Acreage 1280 |

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

| SECTION VI. LISTING OF ALL WELLS IN THE APPLIED FOR FIELD ON THE SAME ACREAGE AS THE LEASE OR POOLED UNIT DESIGNATED FOR THE TRACTS LISTED IN SECTION V BY FILER | | | | | | | | | |
|--|----------|----------------|----------------------|---------------------------------------|--|----------|----------------|----------------------|---------------------------------------|
| RRC ID No. or Lease No. | Well No. | Acres Assigned | SWR 38 Except. (Y/N) | H-Horizontal D-Directional V-Vertical | RRC ID No. or Lease No. | Well No. | Acres Assigned | SWR 38 Except. (Y/N) | H-Horizontal D-Directional V-Vertical |
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| A. Total Wells & Acreage > | | | | | A. Total Wells & Acreage > | | | | |
| B. Total Assigned Horiz. Acreage > | | | | | B. Total Assigned Horiz. Acreage > | | | | |
| C. Total Assigned Vert./Dir. Acreage > | | | | | C. Total Assigned Vert./Dir. Acreage > | | | | |

SECTION VII. REMARKS



| Section & Lease Line Calls | |
|----------------------------|---------------------|
| Surface Location | 467' FEL & 467' FSL |
| Penetration Point | 467' FEL & 467' FSL |
| First Take Point | 100' FNL & 330' FEL |
| Last Take Point | 100' FSL & 330' FEL |
| Bottom Hole Location | 100' FSL & 330' FEL |

| | State Plane Coordinate | | Geodetic (O.M.S.) | | Geodetic (D.D.) | |
|--|------------------------|----------------|-----------------------|-------------------------|-----------------------|-------------------------|
| Surface Location & Penetration Point | X = 500,180.55 | Y = 335,795.34 | Lat = 32°29'39.06\" N | Long = 102°21'38.21\" W | Lat = 32.49418355\" N | Long = 102.36618943\" W |
| First Take Point | X = 500,437.09 | Y = 335,271.42 | Lat = 32°29'34.36\" N | Long = 102°21'36.52\" W | Lat = 32.49287701\" N | Long = 102.36569909\" W |
| Last Take Point & Bottom Hole Location | X = 502,680.72 | Y = 325,158.93 | Lat = 32°27'55.06\" N | Long = 102°21'23.31\" W | Lat = 32.46529489\" N | Long = 102.35647498\" W |

The ULS 5-9 Unit #6H is located approximately 16 miles Northeast of Andrews, Texas.



NOTE:

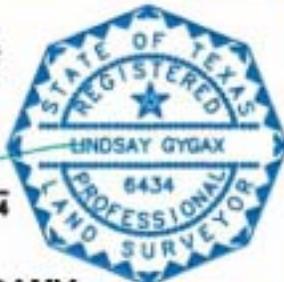
- 1) Plane Coordinates shown hereon are Lambert Grid and Conform to the "Texas Coordinate System", Texas North Central Zone, North American Datum of 1927, unless otherwise noted. Scale factor is 1.000217847.
- 2) Geodetic Coordinates shown hereon references the North American Datum of 1927, unless otherwise noted.
- 3) This plat is provided only for filing purposes with the Texas Railroad Commission and should not be construed as a boundary survey.
- 4) Preliminary for Office Review 05/29/18, issued as Final 05/30/18

Legend

- - - - - Denotes Proposed Well Bore
- ▨▨▨▨▨ Denotes Unit Boundary
- - - - - Denotes Tract Line
- Denotes Proposed Well Location
- Denotes Proposed Take Points
- ⊙ Denotes Proposed Bottom Hole Location

CERTIFICATION:
I hereby certify that this plat was made from notes taken in the field in a bona fide survey made under my supervision.

05-30-18
Lindsay Gygax
Lindsay Gygax Texas R.P.L.S. No. 6434



WEST COMPANY
Land Surveyors & Civil Engineers
110 W. Louisiana Ave., Suite 110, Midland, Texas 79701
(432) 687-0885 - FAX (432) 687-0888
FIRM Registration Number: 100682-00

ZARVONA ENERGY LLC

Location of the
ULS 5-9 UNIT #6 H
SL (467' FSL & 467' FEL) Section 04
BHL (100' FSL & 330' FEL) Section 16
All in Block 5, University Lands Survey
Andrews County, Texas

| | |
|--|-------------------|
| Scale: 1"=2000' | W.O.: 2017-0303-1 |
| Surveyed: 04/28/2017 | Drawn By: SC |
| File: J:\2018\2017-0303-1\2017-0303-1 The ULS 5-9 Unit #6H.dwg | |