



**RAILROAD COMMISSION OF TEXAS**

**Form G-1**

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

Status: Approved  
Date: 06/08/2021  
Tracking No.: 249050

**GAS WELL BACK PRESSURE TEST, COMPLETION OR RECOMPLETION REPORT,**

OPERATOR INFORMATION			
Operator	ZARVONA ENERGY LLC	Operator	950523
Operator	1001 MCKINNEY ST SUITE 1800 HOUSTON, TX 77002-6334		

WELL INFORMATION			
API	42-003-47873	County:	ANDREWS
Well	1H	RRC District	08
Lease	UNIVERSITY 1-3 A	Field	EMMA (MISSISSIPPIAN)
RRC Gas ID	290785	Field No.:	28899581
Location	Section: 3, Block: 1, Survey: UL, Abstract: U3		
Latitude	32.250249	Longitud	-102.496271
This well is	5.5	miles in	SE
direction	ANDREWS, TX,		
which is the nearest town in the			

FILING INFORMATION			
Purpose of	Reclass Oil to Gas		
Type of	Other/Recompletion		
Well Type:	Producing	Completion or Recompletion	07/12/2019
Type of Permit		Date	Permit No.
Permit to Drill, Plug Back, or Rule 37 Exception		08/23/2019	843327
Fluid Injection			
O&G Waste Disposal			
Other:			

COMPLETION INFORMATION			
Spud	12/11/2018	Date of first production after rig	07/12/2019
Date plug back, deepening, drilling operation	12/11/2018	Date plug back, deepening, recompletion, drilling operation	01/12/2019
Number of producing wells on this lease this field (reservoir) including this	1	Distance to nearest well in lease & reservoir	1499.0
Total number of acres in	749.20	Elevation	3128 GL
Total depth TVD	10658	Total depth MD	18565
Plug back depth TVD	10658	Plug back depth MD	18541
Was directional survey made other inclination (Form W-	No	Rotation time within surface casing Is Cementing Affidavit (Form W-15)	No
Recompletion or	Yes	Multiple	No
Type(s) of electric or other log(s)	Gamma Ray (MWD)		
Electric Log Other Description:			
Location of well, relative to nearest lease boundaries of lease on which this well is	410.0 Feet from the North	1115.0 Feet from the West	Off Lease: No Line and Line of the Lease.
		UNIVERSITY 1-3 A	

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease	Well No.	Prior Service Type

G1: N/A  
 PACKET EMMA (MISSISSIPPIAN) 52586 1H

**FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:**

GAU Groundwater Protection Depth 1600.0 Date 08/14/2018  
 SWR 13 Exception Depth

**GAS MEASUREMENT DATA**

Date of 09/19/2019 Gas measurement method  
 Gas production during test 3336 Orifice Meter  
 Was the well preflowed for 48 Yes

Run No.	Line size	Orif. or Choke Size (in.)	24 hr. Coeff. Orif. Or Choke	Static Pm or Choke (in.)	Diff (hw)	Flow Temp (°F)	Temp. (Ftf)	Gravity (Fg)	Compress (Fpv)	Volume (MCF/day)
1	2.900	1.75	1.75	152.0	61.0	102.0	0.9000	0.6790	0.900	1112.0

**FIELD DATA AND PRESSURE CALCULATIONS**

Gravity (dry 0.700 Gravity (liquid hydrocarbons) (Deg. 42.8  
 Gas-Liquid Hydro Ratio (CF/Bbl): 3719 Gravity (mixture): 1.230  
 Avg. shut in temp. (° 68.0 Bottom hole temp. and 333.0 °F@ 10658.0 FT

Run	Time of Run (Min.)	Choke Size	Wellhead Pressure	Wellhead Flow Temp (°F)
SHUT-IN	1440	SI	123	77.0
1	4320	48	0	108.0

**CASING RECORD**

Ro	Type of Casing	Casing Size (in.)	Hole Size	Setting Depth	Multi - Stage Tool	Multi - Stage Shoe	Cement Class	Cement Amoun	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	9 5/8	12 1/4	1798			C	818	1253.0	0	Circulated to Surface
2	Intermediate	7	8 1/2	9817			C + H	420	922.0	5521	Calculation
3	Intermediate	7	8 1/2	9817	5521		C	533	1003.0	0	Calculation

**LINER RECORD**

Ro	Liner Size	Hole Size (in.)	Liner Top	Liner Bottom	Cement Class	Cement Amoun	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	4 1/2	6 1/8	9506	18555	H	966	1258.0	9505	Calculation

**TUBING RECORD**

Ro	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 3/8	10221	10214 / AS 1X PACKER

**PRODUCING/INJECTION/DISPOSAL INTERVAL**

Ro	Open hole?	From (ft.)	To (ft.)
1	No	L1 11010	18524

**ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.**

<b>Was hydraulic fracturing treatment</b>	Yes
<b>Is well equipped with a downhole actuation sleeve?</b> Yes	<b>If yes, actuation pressure</b> 7835.0
<b>Production casing test pressure (PSIG) hydraulic fracturing</b> 8979	<b>Actual maximum pressure (PSIG) during fracturin</b> 8885
<b>Has the hydraulic fracturing fluid disclosure been</b>	Yes
<b>Ro</b>	<b>Type of Operation</b>
1	Fracture
	<b>Amount and Kind of Material Used</b>
	SEE FRAC FOCUS FOR DETAIL
	<b>Depth Interval (ft.)</b>
	11010.0 18524.0

**FORMATION RECORD**

<u>Formations</u>	<u>Encountere</u>	<u>Depth TVD</u>	<u>Depth MD</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
YATES	Yes	3161.0	3185.0	Yes	
SEVEN RIVERS	Yes	3374.0	3401.0	Yes	
QUEEN	No			No	PINCHED
GRAYBURG	Yes	4611.0	4652.0	Yes	
SAN ANDRES - CO2 FLOOD, HIGH FLOWS, H2S, CORROSIVE	Yes	4947.0	4991.0	Yes	
HOLT	No			No	PINCHED
GLORIETA	Yes	5550.0	5601.0	Yes	
TUBB	No			No	PINCHED
CLEARFORK	Yes	6890.0	6956.0	Yes	
PERMIAN DETRITAL	No			No	PINCHED
LEON	Yes	7059.0	7125.0	Yes	
WICHITA ALBANY	Yes	7420.0	7488.0	Yes	
SPRABERRY	Yes	7763.0	7834.0	Yes	
DEAN	Yes	8512.0	8583.0	Yes	
WOLFCAMP	Yes	8666.0	8704.0	Yes	
CANYON	Yes	9516.0	9588.0	Yes	
PENNSYLVANIAN	No			No	PINCHED
MCKEE	No			No	PINCHED
STRAWN	Yes	9932.0	10004.0	Yes	
MISSISSPPIAN	Yes	10513.0	10734.0	Yes	
FUSSELMAN	No			No	PINCHED
DEVONIAN	No			No	PINCHED
SILURIAN	No			No	PINCHED
ELLENBURGER	No			No	PINCHED
<b>Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm</b>	No				
<b>Is the completion being downhole commingled (SWR)</b>	No				

**REMARKS**

GAS WELL CLASSIFICATION PER RULE 5 OF DOCKET 08-0322585 AMENDING FIELD RULES FOR EMMA (BARNETT SHALE) AND EMMA (MISSISSIPPIAN) FIELDS ATTACHED. NO PVT ANALYSIS REQUIRED.

**RRC REMARKS**

**PUBLIC COMMENTS:**

**CASING RECORD :**

**TUBING RECORD:**

**PRODUCING/INJECTION/DISPOSAL INTERVAL :**

**ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :**

**GAS MEASUREMENT DATE REMARK:**

**OPERATOR'S CERTIFICATION**

<b>Printed</b>	Debbie Ghani	<b>Title</b>	Consultant
<b>Telephone</b>	(832) 293-4251	<b>Date</b>	05/24/2021

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

GAS WELL  
CLASSIFICATION REPORT

Form G-5

Tracking No.: 249050

This facsimile G-5 was generated electronically from data submitted to the RRC.

1. OPERATOR NAME (Exactly as shown on Form P5 Organization Report) ZARVONA ENERGY LLC		3. RRC DISTRICT NO. 08	4. OIL LEASE NO OR GAS WELL ID NO. 290785
2. MAILING ADDRESS 1001 MCKINNEY ST SUITE 1800 HOUSTON, TX 77002-6334		5. WELL NO. 1H	6. API NO. 42- 003-47873
		7. COUNTY OF WELL SITE ANDREWS	

8. FIELD NAME (as per RRC Records) EMMA (MISSISSIPPIAN)	9. LEASE NAME UNIVERSITY 1-3 A
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10. LOCATION (Section, Block and Survey) 3 , 1 , UL , A-U3	11. PIPELINE CONNECTION OR USE OF GAS
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<p><b>PRODUCTION TEST AT RATE ELECTED BY OPERATOR</b> (data on 24-hour basis)</p> <p>A. Date of Test <u>09/19/2019</u></p> <p>B. Gas Volume <u>1112.0</u> (Mcf)</p> <p>C. Oil or Condensate Volume <u>299.0</u> (Bbl)</p> <p>D. Water Volume <u>188.0</u> (Bbl)</p> <p>E. Gas/Liquid Hydrocarbon Ratio <u>3719</u> (Cf/Bbl)</p> <p>F. Flowing Tubing Pressure <u>0</u> (psia)</p> <p>G. Choke Size <u>48</u> (in.)</p> <p>H. Casing Pressure _____ (psia)</p> <p>I. Shut-in Wellhead Pressure-- Tubing <u>123</u> (psia)</p> <p>J. Separator Operating Pressure <u>55.0</u> (psia)</p> <p>K. Color of Stock Tank Liquid <u>Yellow</u></p> <p>L. Gravity of Separator Liquid <u>42.8</u> °API</p> <p>M. Gravity of Stock Tank Liquid _____ °API</p> <p>N. Specific Gravity of the Gas (Air = 1) <u>0.7</u></p>	<p><b>A.S.T.M. DISTILLATION OF LIQUID SAMPLE.</b> Distillation test is required for gas wells ONLY if the producing gas-liquid hydrocarbon ratio is less than 100,000 CF/barrel.</p> <p>Date Liquid Sample Obtained _____</p> <p>Where Obtained: <input type="checkbox"/> Separator <input type="checkbox"/> Stock Tank</p> <table style="width: 100%;"> <tr> <td style="width: 50%;">% Over Temp. (deg. F)</td> <td style="width: 50%;">% Over Temp. (deg. F)</td> </tr> <tr> <td>Initial Boiling Temp. _____</td> <td>60 _____</td> </tr> <tr> <td>10 _____</td> <td>70 _____</td> </tr> <tr> <td>20 _____</td> <td>80 _____</td> </tr> <tr> <td>30 _____</td> <td>90 _____</td> </tr> <tr> <td>40 _____</td> <td>95 _____</td> </tr> <tr> <td>50 _____</td> <td>End Point _____</td> </tr> </table> <p>Total Recovery _____ percent</p> <p>Residue _____ percent</p> <p>Loss _____ percent</p>	% Over Temp. (deg. F)	% Over Temp. (deg. F)	Initial Boiling Temp. _____	60 _____	10 _____	70 _____	20 _____	80 _____	30 _____	90 _____	40 _____	95 _____	50 _____	End Point _____
% Over Temp. (deg. F)	% Over Temp. (deg. F)														
Initial Boiling Temp. _____	60 _____														
10 _____	70 _____														
20 _____	80 _____														
30 _____	90 _____														
40 _____	95 _____														
50 _____	End Point _____														

<p>I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete to the best of my knowledge.</p> <p><u>04/22/2021</u></p> <p>DATE</p>	RRC USE ONLY
	<p>NAME (Type or Print)</p> <p><u>Debbie Ghani</u></p>
	<p>SIGNATURE</p> <p><u>Consultant</u></p> <p>TITLE</p>
	<p>(832) 293-4251</p> <p>PHONE NUMBER</p>
	CONTACT PERSON

Tracking No.: 249050

OPERATOR NAME AND ADDRESS including city, state and zip  
**ZARVONA ENERGY LLC**  
 1001 MCKINNEY ST SUITE 1800  
 HOUSTON, TX 77002-6334

# GAS WELL STATUS REPORT

RAILROAD COMMISSION OF TEXAS  
 Oil and Gas Division  
 P.O. Box 12967  
 Austin, Texas 78711-2967

*This facsimile G-10 was generated electronically  
 from data submitted to the RRC.*

Reason for Filing	Operator P-5 Organization No.	RRC Dist. No.	<b>G-10</b>
<input type="checkbox"/> Survey <input checked="" type="checkbox"/> Initial Test	950523	08	
<input type="checkbox"/> Retest <input type="checkbox"/> Correction	Test Period: Due Date: Effective Date:		

FIELD NAME * LEASE NAME	RRC IDENT NO.	DATE TESTED MO/DAY/YR	GAS PRODUCED MCF/DAY **	CONDENSATE PRODUCED	WATER PROD BBL/DAY	***SIWH PRESSURE PSIA
	WELL NO.	MARK X FOR SHUT-IN WELL	GAS SPEC. GRAVITY	CONDENSATE GRAVITY (API)	X BOTTOMHOLE PRESSURE PSIA	***FLOWING PRESSURE PSIA
EMMA (MISSISSIPPIAN)	290785	09/19/2019	1112 MCF	299.0 BBL	188.0 BBL	123
UNIVERSITY 1-3 A	1H		0.7	0.0		0
			MCF	BBL	BBL	
			MCF	BBL	BBL	
			MCF	BBL	BBL	
			MCF	BBL	BBL	
			MCF	BBL	BBL	
			MCF	BBL	BBL	
			MCF	BBL	BBL	

CERTIFICATION: I declare under penalties prescribed in Texas Natural Resources Code, Sec. 91.143, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated herein are true, correct, and complete to the best of my knowledge.

**Signature:** Debbie Ghani **Title:** Consultant **Phone:** (832) 293-4251 **Date:** 04/29/2021

\* AN ASTERISK PREPRINTED ON A SURVEY IDENTIFIES WELL SUBJECT TO COMMINGLING TEST REQUIREMENT

\*\* GAS PRODUCTION RATE, IN MCF, IS TO BE REPORTED FULL-WELL STREAM, INCLUDING

\*\*\* PRESSURE FOR THE TEXAS HUGOTON FIELD IS REPORTED IN PSIG

X AN 'X' PREPRINTED ON A SURVEY IN THE BOTTOMHOLE PRESSURE BOX INDICATES A BOTTOMHOLE PRESSURE MUST BE REPORTED FOR THE WELL

**CERTIFICATE OF COMPLIANCE  
 AND TRANSPORTATION AUTHORITY**

This facsimile P-4 was generated electronically from data submitted to the RRC.  
 A certification of the automated data is available in the RRC's Austin office.

Tracking No.: 249050

1. Field name exactly as shown on proration schedule <b>EMMA (MISSISSIPPIAN)</b>	2. Lease name as shown on proration schedule <b>UNIVERSITY 1-3 A</b>			
3. Current operator name exactly as shown on P-5 Organization Report <b>ZARVONA ENERGY LLC</b>	4. Operator P-5 no. <b>950523</b>	5. Oil Lse/Gas ID no <b>290785</b>	6. County <b>ANDREWS</b>	7. RRC district <b>08</b>
8. Operator address including city, state, and zip code <b>1001 MCKINNEY ST SUITE 1800                  HOUSTON, TX 77002-6334</b>	9. Well no(s) (see instruction E) <b>1H</b>			11. Effective Date <b>07/12/2019</b>
10. Classification <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)				

12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G)

**a. Change of:**  operator  oil or condensate gatherer  gas gatherer  gas purchaser  gas purchaser system code  
 field name from: \_\_\_\_\_ Docket #: \_\_\_\_\_  
 lease name from: \_\_\_\_\_

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**b. New RRC Number for:**  oil lease  gas well  other well (specify) \_\_\_\_\_

**Due to:**  new completion or recompletion  reclass oil to gas  reclass gas to oil  
 consolidation  unitization  
 field transfer  subdivision (oil lease only)

13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).

Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left <i>(Attach an additional sheet in same format if more space is needed)</i>	Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X	X	DCP OPERATING COMPANY, LP(195959)	0001	50.0	
X	X	JAMES LAKE MIDSTREAM LLC(429665)	0001	50.0	

14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).

Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First <i>(Attach an additional sheet in same format if more space is needed)</i>	Percent of Take
GIBSON ENERGY MARKETING, LLC(302773)	100.0

**RRC USE ONLY:** Reviewer's initials: RRC Staff Approval date: 06/08/2021

**15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING.** Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.

Name of Previous Operator _____ Name (print) _____ Title _____	Signature _____ <input type="checkbox"/> <b>Authorized Employee of previous operator</b> <input type="checkbox"/> <b>Authorized agent of previous operator (see instruction G)</b> Date _____ Phone with area code _____
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**16. CURRENT OPERATOR CERTIFICATION.** By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.

Name (print) _____ Consultant Title _____ E-mail Address (optional) _____	Signature _____ <input type="checkbox"/> <b>Authorized Employee of current operator</b> <input checked="" type="checkbox"/> <b>Authorized agent of current operator (see instruction G)</b> Date _____ Phone with area code _____
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**RAILROAD COMMISSION OF TEXAS  
HEARINGS DIVISION**

**OIL AND GAS DOCKET NO. 08-0322585**

**APPLICATION OF ELEVATION RESOURCES LLC (247756) FOR SEPARATION OF THE EMMA (MISSISSIPPIAN) INTO TWO FIELDS, PERMANENT GAS WELL CLASSIFICATION FOR CERTAIN WELLS IN THE NEW FIELD, AND FOR FIELD RULES TO BE PLACED IN THE PROPOSED NEW FIELD, EMMA (BARNETT SHALE) FIELD, ANDREWS COUNTY, TEXAS**

**FINAL ORDER**

The Commission finds that after statutory notice of the application made by Elevation Resources LLC (247756) in the above-numbered docket heard on May 6, 2019, the Technical Examiner and Administrative Law Judge (collectively "Examiners") have made and filed a report and recommendation containing findings of fact and conclusions of law, for which service was not required; that the proposed application is in compliance with all statutory requirements; and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas.

The Commission, after consideration of this matter, hereby adopts as its own the findings of fact and conclusions of law contained in the Report and incorporates said findings of fact and conclusions of law as if fully set out and separately stated herein.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the Emma (Mississippian) Field shall be separated into two fields, the Emma (Mississippian) Field and the Emma (Barnett Shale) Field, Andrews County, Texas. The Emma (Mississippian) Field shall be governed by the field rules adopted in the Oil and Gas Docket No. 08-0318613, while the Emma (Barnett Shale) Field shall be governed by the following permanent field rules:

**RULE 1:** The entire correlative interval from 10,430 feet to 10,920 feet as shown on the Three Rivers Operating Company II, LLC University 30 Cobra #3033 well (API No. 42-003-46646), Spectral Density Dual Spaced Neutron Spectral Gamma Ray Microlog, Andrews County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Emma (Barnett Shale) Field.

**RULE 2:** No well for oil or gas shall hereafter be drilled nearer than **THREE HUNDRED THIRTY (330)** feet to any property line, lease line, or subdivision line. There is no minimum between well spacing requirement. The aforementioned distances for this rule are minimum distances to allow an operator flexibility in locating a well, and the above spacing rule and the other rule to follow are for the purpose of permitting only one well to each drilling and proration unit in the field. Provided however, that the Commission will grant exceptions to permit drilling within shorter distances and drilling more wells than herein prescribed whenever the Commission shall have determined that such exceptions are necessary either to prevent waste or to prevent the confiscation of property. When

exception to these rules is desired, application therefore shall be filed and will be acted upon in accordance with the provisions of Commission Statewide Rules 37 and 38, which applicable provisions of said rules are incorporated herein by reference.

In applying this rule, the general order of the Commission with relation to the subdivision of property shall be observed.

Provided, however, that for purposes of spacing for horizontal wells, the following shall apply:

- a. A take point in a horizontal drainhole well is any point along a horizontal drainhole where oil and/or gas can be produced from the reservoir/field interval. The first take point may be at a different location than the penetration point and the last take point may be at a location different than the terminus point.
- b. No horizontal drainhole well for oil or gas shall hereafter be drilled such that the first and last take point are nearer than ONE HUNDRED (100) feet to any property line, lease line or subdivision line.
- c. For each horizontal well, the perpendicular distance from any take point on such horizontal drainhole between the first take point and the last take point to any on any property line, lease line or subdivision line shall be a minimum of THREE HUNDRED THIRTY (330) feet.

For the purpose of assigning additional acreage to a horizontal well pursuant to Statewide Rule 86, the distance from the first take point to the last take point in the horizontal drainhole shall be used in such determination, in lieu of the distance from penetration point to terminus.

**RULE 3a:** The acreage assigned to the individual oil well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. The standard drilling and proration units are established hereby to be FORTY (40) acres. No proration unit shall consist of more than FORTY (40) acres except as hereinafter provided. All proration units shall consist of continuous and contiguous acreage which can reasonably be considered to be productive of oil. No double assignment of acreage will be accepted.

If after the drilling of the last oil well on any lease and the assignment of acreage to each well thereon in accordance with the regulations of the Commission there remains an additional unassigned acreage of less than FORTY (40) acres, then and in such event the remaining unassigned acreage up to and including a total of TWENTY (20) acres may be assigned as tolerance acreage to the last oil well drilled on such lease or may distributed among any group of oil wells located thereon, so long as the proration units resulting from the inclusion of such additional acreage meet the limitations prescribed by the Commission.

**RULE 3b:** The acreage assigned to the individual gas well for the purpose of allocating allowable gas production thereto shall be known as a proration unit. The

standard drilling and proration units are established hereby to be FORTY (40) acres. No proration unit shall consist of more than FORTY (40) acres; provided that tolerance acreage of ten (10) percent shall be allowed for each standard gas proration unit so that an amount not to exceed a maximum of FORTY-FOUR (44) acres may be assigned. Each gas proration unit containing less than FORTY-FOUR (44) acres shall be a fractional proration unit. All proration units shall consist of continuous and contiguous acreage which can reasonably be considered to be productive of gas. No double assignment of acreage will be accepted.

For the determination of acreage credit in this field, operators shall file for each gas well in this field Form P-15 Statement of Productivity of Acreage Assigned to Proration Units, or Form P-16 Data Sheet Acreage Designation. On that form or an attachment thereto, the operator shall list the number of acres that are being assigned to each well on the lease or unit for proration purposes. Operators shall be required to file, along with the Form P-15 or P-16, a plat of the lease, unit or property; provided that such plat shall not be required to show individual proration units. Provided further that if the acreage assigned to any well has been pooled, the operator shall furnish the Commission with such proof as it may require as evidence that interests in and under such proration unit have been so pooled. There is no maximum diagonal limitation in this field.

**RULE 4a:** The maximum daily oil allowable for each well in the subject field shall be determined by multiplying 210 barrels of oil per day by a fraction, the numerator of which is the acreage assigned to the well for proration purposes and the denominator of which is the maximum acreage authorized by these field rules for a vertical well for proration purposes, exclusive of tolerance acreage. Each oil well shall have unlimited net gas-oil ratio authority.

The maximum daily allowable for a horizontal drainhole well in the field shall be determined by multiplying the applicable allowable for a vertical well in the field with a proration unit containing the maximum acreage authorized by the applicable rules for the field, exclusive of tolerance acreage, by a fraction:

- A. the numerator of which is the acreage assigned to the horizontal drainhole well for proration purposes; and
- B. the denominator of which is the maximum acreage authorized by the applicable field rules for proration purposes, exclusive of tolerance acreage.

**RULE 4b:** The daily allowable production of gas from individual wells completed in the subject field shall be determined by allocating the allowable production, after deductions have been made for wells which are incapable of producing their gas allowables, among the individual wells in the following manner:

NINETY-FIVE percent (95%) of the total field allowable shall be allocated among the individual wells in the proportion that the deliverability of such well, as evidenced by the most recent G-10 test filed with the Railroad Commission,

bears to the summation of the deliverability of all prorable wells producing in this field.

FIVE percent (5%) of the field's total allowable shall be allocated among all the individual prorable wells producing in the field.

The allocation formula for gas wells in the Emma (Barnett Shale) Field shall be suspended. The allocation formula for the gas field may be reinstated administratively, in accordance with the Commission rules, if the market demand for gas in the Emma (Barnett Shale) Field drops below 100% of deliverability.

**RULE 5:** Any well in the Emma (Barnett Shale) or the Emma (Mississippian) completed with a gas-liquid hydrocarbon ratio (GLR) of 3,000 cubic feet per barrel and above, the operator may elect to have such well permanently classified as a gas well without the need of further administrative review effective the date of initial completion, provided the initial producing GLR was determined by stabilized well test conducted within 180 days of well completion and in accordance with the GLR determination requirements of Commission procedures as indicated on Forms G-1, G-5, or W-2 as appropriate, and using gas measurement methods as described in the current Commission publication Gas-Oil Ratio Calculation, or methods of at least equal accuracy. Further, applications to reclassify existing wells as permanent gas wells must be made within 90 days of the effective date of this order.

It is further **ORDERED** by the Railroad Commission of Texas that the various wells listed in the following table are hereby transferred into the Emma (Barnett Shale) Field without requiring new drilling permits.

Lease	Well No.	RRC Identifier	API No.
UL G 1-15 Unit	2H	Lease #48805	42-003- 47464
UL G 9-46 Unit	2H	Lease #49170	42-003- 47478
UL G 1-20	6H	Lease #49493	42-003- 47534
UL G 10-24 Unit	3H	Lease #49589	42-003- 47599
UL G 9-41 Unit	2H	Lease #50033	42-003- 47676
UL G 1-22 Unit	5H	Lease #50174	42-003- 47661
UL G 1-4 Unit	5H	Lease #50669	42-003- 47740
UL G 1-15	4H	Drilling Permit #839006	42-003- 47804

UL G 1-28 Unit	3H	Drilling Permit #824678	42-003- 47523
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It is further **ORDERED** by the Railroad Commission of Texas that a Form P-4, Producer's Transportation Authority and Certificate of Compliance, is required to be filed for all leases in the prior existing fields to change the field name to the Emma (Barnett Shale) Field. New lease numbers will be assigned if the operator does not already have an existing lease number assigned in the Emma (Barnett Shale) Field. A Form P-16, Acreage Designation, and full lease plats are also required in the new field and should be sent to the Commission with the Form P-4 if acres are not already assigned to the operator's wells that meet the new field criteria. **Operators must comply with the order within sixty (60) days of this order's final and effective date.**

Pursuant to §2001.144(a)(4)(A), of the Texas Government Code, and by agreement of the parties in writing or on the record, **the parties have waived the right to file a Motion for Rehearing and this Final Order is effective on the date the Master Order relating to the Final Order is signed.**

Signed on October 1, 2019.

#### **RAILROAD COMMISSION OF TEXAS**

**(Order approved and signatures affixed by Hearings Division's Unprotected Master Order dated October 1, 2019)**

## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 14 August 2018      **GAU Number:** 203747

<b>Attention:</b>	ZARVONA ENERGY LLC 1010 LAMAR ST SUITE 500 HOUSTON, TX 77002	<b>API Number:</b>	
<b>Operator No.:</b>	950523	<b>County:</b>	ANDREWS
		<b>Lease Name:</b>	UNIVERSITY 1-3
		<b>Lease Number:</b>	
		<b>Well Number:</b>	1H
		<b>Total Vertical Depth:</b>	15000
		<b>Latitude:</b>	32.250250
		<b>Longitude:</b>	-102.496271
		<b>Datum:</b>	NAD27

**Purpose:** New Production Well  
**Location:** Survey-UL; Abstract-U3; Block-1; Section-3

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

The interval from the land surface to a depth of 250 feet, and the zone from 1250 to 1600 feet must be protected.

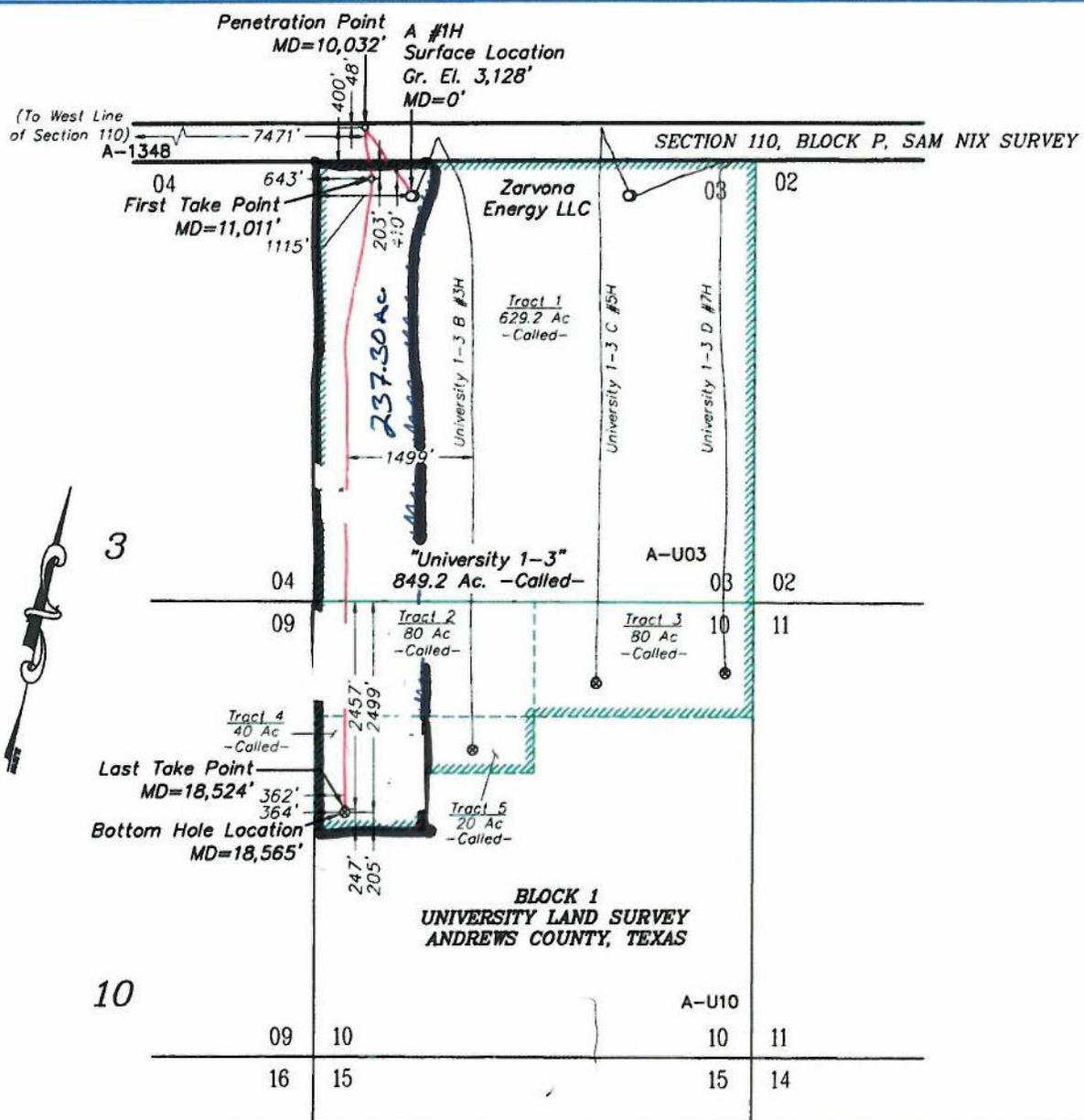
This recommendation is applicable for all wells drilled in this Section 3.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. Unless stated otherwise, this recommendation is for normal drilling, production, and plugging operations only.

This determination is based on information provided when the application was submitted on 08/08/2018. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

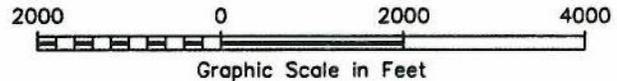
Form GW-2      P.O. Box 12967      Austin, Texas      78771-2967      512-463-2741      Internet address: www.rrc.texas.gov  
Rev. 02/2014



	State Plane Coordinate		Geodetic (D.M.S.)		Geodetic (D.D.)	
Surface Location	X = 455,892.36	Y = 249,037.24	Lat = 32°15'00.90" N	Long = 102°29'46.58" W	Lat = 32.25024994° N	Long = 102.49627141° W
Penetration Point	X = 455,177.55	Y = 249,704.28	Lat = 32°15'07.16" N	Long = 102°29'55.26" W	Lat = 32.25198800° N	Long = 102.49868345° W
First Take Point	X = 455,388.22	Y = 249,134.11	Lat = 32°15'01.62" N	Long = 102°29'52.49" W	Lat = 32.25045002° N	Long = 102.49791511° W
Last Take Point	X = 456,726.84	Y = 241,775.51	Lat = 32°13'49.51" N	Long = 102°29'32.85" W	Lat = 32.23042035° N	Long = 102.49245957° W
Bottom Hole Location	X = 456,736.39	Y = 241,735.68	Lat = 32°13'49.12" N	Long = 102°29'32.72" W	Lat = 32.23031224° N	Long = 102.49242259° W

Section & Lease Line Calls	
Surface Location	410' FNL & 1115' FWL
Penetration Point	48' FNL & 7471' FWL
First Take Point	203' FNL & 643' FWL
Last Take Point	2457' FNL & 362' FWL
Bottom Hole Location	2499' FNL & 364' FWL

The University 1-3 A #1H is located approximately 5.5 miles Southeast of Andrews, Texas.



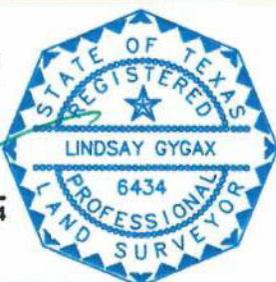
NOTE:

- 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 1.000169588.
- 2) Geodetic Coordinate 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) Measured Depth allocation is approximate and based on downhole report and take points as provided by client.

- 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.

08-09-19  
*Lindsay Gygax*  
Lindsay Gygax Texas R.P.L.S. No. 6434



## ZARVONA ENERGY LLC

As-Drilled Plat of the  
**UNIVERSITY 1-3 A #1H**  
(237.30 Acres Assigned)  
Sections 03 & 10,  
Block 1, University Land Survey  
Andrews County, Texas

**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

Scale: 1" = 2000'	W.O.: 2019-0351-2
Surveyed: 07/20/2018	Drawn By: CH/SC
File: J:\2019\2019-0351-2\2019-0351-2 University 1-3 IH and 3H As-Drilled.dwg	