

# Well Installation Report

West Pearl Queen

Unit B of Section 32, Township 19 South, Range 35 East NMPM

NMOCD reference: NOY1816446096

Resubmitted August 13, 2025, to the New Mexico Energy, Minerals and Natural Resources Department - Oil Conservation Division on behalf of Armstrong Energy Corporation



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
[www.atkinseng.com](http://www.atkinseng.com)

## Contents

---

### List of Appendices

### List of Tables and Figures

1	Introduction.....	1
1.1.	Background.....	1
1.2.	Deviations from the Approved Workplan.....	1
2	Monitor Well Installation Activities .....	1
2.1.	Access Agreements.....	1
2.3.	New Mexico Office of the State Engineer Permitting and Reporting .....	1
2.5.	Monitor Well Installation.....	2
3	Monitor Well Professional Survey.....	2
4	Conclusion .....	3
	Appendix A – Figures .....	4
	Appendix B – District II NMOSE Permitting and Reporting .....	5
	Appendix C – Surveyor-Stamped Data Table.....	6
	Appendix D – Monitor Well Records and Field Sheets .....	7

### Appendices

#### Appendix A – Figures

#### Appendix B – District II NMOSE Permitting and Reporting

#### Appendix C – Surveyor-Stamped Data Table

#### Appendix D – Monitor Well Records, Logs and Field Sheets

### Figures

#### Figure A1. Site Map and Well Locations

### Tables and Graphs

#### Table 1: Site Groundwater Wells v. NMOSE POD File Numbers

#### Table 2: Monitor Well Survey Data

# 1 Introduction

---

Atkins Engineering Associates, Inc. (AEA), on behalf of Armstrong Energy Corporation, is pleased to provide this Well Installation Report, pursuant to the July 2, 2024 workplan submitted to the New Mexico Energy, Minerals and Natural Resources Department - Oil Conservation Division (NMOCD), for the Armstrong Energy Corporation West Pearl Queen Site (WPQ), for activities preceding the design of a full Stage 1 Abatement Plan (reference number NOY1816446096).

## 1.1. Background

The WPQ site is in the NE/4NW/4NE/4 Section 32, Township 19S, Range 35 East, NMPM at approximately 32.62295554°, -103.4757431°, at a general altitude of 3,736 feet above mean sea level (ft-amsl), from the USGS Topographic Map, in Lea County New Mexico.

In accordance with the approved workplan, AEA plugged and abandoned eight (8) wells, SB-4, SB-5, SB-7, SB-13, and SB-20 through SB-23. Additionally, two (2) temporary wells, SB-2 and SB-14 were recompleted as permanent groundwater monitoring wells. Subsequent to the excavation activities completed by PIMA, AEA installed three (3) replacement wells, MW-5R, MW-7R, and MW-24. A site map showing the location of the existing and new wells is provided in Figure A1, Appendix A.

## 1.2. Deviations from the Approved Workplan

There were no deviation from the approved plan.

# 2 Monitor Well Installation Activities

---

## 2.1. Access Agreements

Prior to well installation, AEA secured an easement from the State Land Offices (WM-672). See Appendix B.

## 2.3. New Mexico Office of the State Engineer Permitting and Reporting

On January 14, 2025, AEA prepared and filed an Application for Permit to Drill a Well with No Water Right with the District II New Mexico Office of the State Engineers (OSE) for the installation of three (3) groundwater monitor wells, MW-5R, MW-7R, and MW-24. The permit was issued on February 10, 2025. Table 1 lists the OSE points of diversion (POD) designation for all site wells.

Table 1. Site Groundwater Wells v. NMOSE POD File Numbers

Monitor Well	NMOSE File	NMOSE Well POD Number
MW-2	L-14876	L-14876 POD-2
MW-14	L-14876	L-14876 POD-14
MW-5R*	L-15833	L-15833 POD-1
MW-7R*	L-15833	L-15833 POD-2
MW-24*	L-15833	L-15833 POD-3

\* New well

Well records and logs for the newly installed wells were submitted to OSE on March 19, 2025. Copies of the installation permit and well records are provided in Attachment B.

## 2.5. Monitor Well Installation

Between February 24 and February 27, 2025, AEA staff installed three (3) new monitor wells. See drilling information in Appendix D.

Each borehole was logged using the Universal Soil Classification System (USCS) method. Subsurface soil layers consisted of poorly-graded sand to approximately sixteen (16) to twenty (20) feet below ground level (bgl), ending with clay to total depth. Groundwater was encountered at approximately twenty-three (23) feet bgl in soil boring SB-5R, and twenty-four (24) feet bgl in SB-7R and SB-24. Soil borings were advanced to approximately one (1) feet below the water table, which is the top of the red bed. Each well was completed with 2-inch schedule 40 PVC as shown on the well records.

## 3 Monitor Well Professional Survey

On March 14, 2025, an AEA conducted a survey to determine the horizontal and vertical positions of the site's existing and new monitor wells. Horizontal positions were established using a Topcon GR-5 base and receiver. Horizontal coordinates are in US Survey Feet NAD 83 (2011) New Mexico State Plane East Grid Coordinates, scaled to ground with a combined scale factor 1.0001865347887380997. Elevations were determined using Orthometric Heights established RTK GPS observations tied to a newly-installed Temporary Benchmark (TBM). The TBM is the top pf a corner of a 2-inch pipe fence, with an established Orthometric Height of 3737.61 feet NAVD88, determined using GPS observations tied to NGS Benchmark "R 97" with a published Orthometric Height of 3894.17 feet NAVD88.

Table 2 summarizes the survey data for all site wells. A surveyor-stamped data table for all monitor wells is included in Appendix C.

Table 2. Monitor Well Survey Data

Site Well	Northing (USft)	Easting (USft)	Latitude (DD)	Longitude (DD)	TOC Elevation (USft)
MW-2	591323.20	805345.85	32.62266980	-103.47582846	3739.31
MW-5R	591475.32	805313.52	32.62308861	-103.47592947	3738.23
MW-7R	591424.53	805381.95	32.62294750	-103.47570856	3737.98
MW-14	591472.52	805447.81	32.62307794	-103.47549341	3738.27
MW-24	591502.42	805409.27	32.62316097	-103.47561779	3738.25

## 4 Conclusion

---

The installation of replacement wells SB-05R, SB-07R, and SB-24 was completed in February 2025. AEA will conduct groundwater sampling of all the site wells in April-May 2025. A report including sampling results and recommendations will be submitted to NMOCD as indicated in the approved workplan.

## Appendix A – Figures





● Monitor Well Location

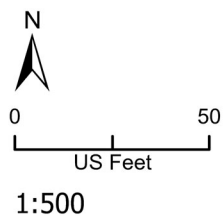


Figure A1. West Pearl Queen  
Site Map and Well Locations

FIELD: 2/24 - 2/27/2025

DRAWN: 4/7/2025



## Appendix B – District II NMOSE Permitting and Reporting





2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
[www.atkinseng.com](http://www.atkinseng.com)

01/14/2025

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Application to Drill a Well with No Water Right for West Peral Queen Site

To whom it may concern:

Atkins Engineering Associates, Inc. (AEA) has been contracted to install three (3) Soil boring/monitoring wells at West Pearl Queen Site, Lea County, New Mexico. Please find, in triplication, an *Application to Drill a Well with No Water Right*. A check for \$15.00 to process the application.

If you, have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton".

Lucas Middleton

Enclosures: As noted above.

133 OCT 2004 10:11 AM  
2004 OCT 20 10:11 AM

File No. 

## NEW MEXICO OFFICE OF THE STATE ENGINEER

### WR-07 APPLICATION FOR PERMIT TO DRILL

#### A WELL WITH NO WATER RIGHT

(check applicable boxes):



For fees, see State Engineer website: <https://www.ose.nm.gov/>

Purpose:

☐Pollution Control  
And/Or Recovery☐

Ground Source Heat Pump

☐ Exploratory Well\*(Pump test)☐Construction Site/Public  
Works Dewatering☐ Other(Describe):☒ Monitoring Well☐

Mine Dewatering

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

\*New Mexico Environment Department-Drinking Water Bureau (NMED-DWB) will be notified if a proposed exploratory well is used for public water supply.

☐ Yes ☒ No Angled/Directional borehole - include schematic and azimuth, inclination, measured depth and true vertical depth.

☐ Temporary Request - Requested Start Date:

Requested End Date:

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

Note: if there is known artesian conditions, contamination or high mineral content at the drilling location, include the borehole log or a well log from an existing well at that location. If this information is not submitted, check box and attach form WD-09 to this form. ☐

### 1. APPLICANT(S)

Name: Armstrong Energy	Name:
Contact or Agent: <span style="float: right;">check here if Agent <input type="checkbox"/></span> Kye Alpers	Contact or Agent: <span style="float: right;">check here if Agent <input type="checkbox"/></span>
Mailing Address: P.O. Box 1973	Mailing Address:
City: Roswell	City:
State: <span style="float: right;">Zip Code:</span> New Mexico <span style="float: right;">88201</span>	State: <span style="float: right;">Zip Code:</span>
Phone: (575) 626-2727 <span style="float: right;"><input type="checkbox"/> Home <input type="checkbox"/> Cell</span> Phone (Work):	Phone: <span style="float: right;"><input type="checkbox"/> Home <input type="checkbox"/> Cell</span> Phone (Work):
E-mail (optional): kalpers@aecnrm.com	E-mail (optional):

FOR OSE INTERNAL USE

Application for Permit, Form WR-07, Rev 10/02/2024

File No.:	Trn. No.:	Receipt No.:
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date:	

Page 1 of 3

**2. WELL(S)** Describe the well(s) applicable to this application.

**Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).**  
**District II (Roswell), District V (Aztec) and District VII (Cimarron) customers, provide a PLSS location in addition to above.**

☐ NM State Plane (NAD83) (Feet)      ☐ UTM (NAD83) (Meters)      ☒ Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)  
☐ NM West Zone      ☐ Zone 12N  
☐ NM East Zone      ☐ Zone 13N  
☐ NM Central Zone

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	-Public Land Survey System (PLSS) (QQQSection, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name	Well Depth in feet	Casing Diameter (OD)
SB-5R	103°28'33.4	32°37'23.1	NE NW NE Sec. 32 T19S R35E	32	2"
SB-7R	103°28'32.6	32°37'22.6	NE NW NE Sec. 32 T19S R35E	32	2"
SB-24	103°28'32.3	32°37'23.7	NE NW NE Sec. 32 T19S R35E	32	2"

**NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)**  
 Additional well descriptions are attached: ☐ Yes ☒ No      If yes, how many \_\_\_\_\_

Other description relating well to common landmarks, streets, or other:

Well is on land owned by: New Mexico State Land Office

**Well Information: NOTE: If casings telescope or involve nested casing, please provide diagram. Attached?** ☐ Yes ☒ No

Approximate depth to water (feet): 18      Outside diameter of well casing (inches): 2.375

Driller Name: Jackie D. Atkins ( Atkins Engineering Associates Inc.)      Driller License Number: 1249

**3. ADDITIONAL STATEMENTS OR EXPLANATIONS**

See attached approval Monitoring Well Easement from the New Mexico State Land Office. If more information is needed please contact Faith Crosby -505.827.5849

USE ONLY FOR INTERNAL USE  
 14 JUL 2025 11:11

FOR OSE INTERNAL USE

Application for Permit, Form WR-07 Version 10/02/2024

File No.:

Trm No.:

Page 2 of 3

**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<p><b>Exploratory*:</b> Is proposed well a future public water supply well? <input type="checkbox"/> Yes <input type="checkbox"/> NO If Yes, an application must be filed with NMED-DWB, concurrently. <input type="checkbox"/> Include a description of any proposed pump test, if applicable.</p> <p><b>Monitoring*:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.</p>	<p><b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.</p>	<p><b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.</p> <p><b>Ground Source Heat Pump:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.</p>	<p><b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for Mine De-Watering, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water. <input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.</p>
--	---	--	---

(\* if exploration or monitoring drilling activity is required by NMED, then you must also submit the NMED Work Plan)

#### ACKNOWLEDGEMENT

I, **We (name of applicant(s))**, Kye Alpers on behalf of Armstrong Energy Corp.

Print Name(s)

affirm that the foregoing statements are true to the best of (my,our) knowledge and belief.

*Kye Alpers*

Applicant Signature

Applicant Signature

#### ACTION OF THE STATE ENGINEER

This application is:

☐ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_, for the State Engineer,

\_\_\_\_\_, State Engineer

By:

Signature

Print

Title:

Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07 Version 10/02/2024

File No.:

Trn No.:






# WR-07-forsign -

Final Audit Report

2025-01-13

Created:	2025-01-10
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAMLWoDh1Ho6dzKdAWyXe2B7Rb2M5CjJe

## "WR-07-forsign -" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2025-01-10 - 2:44:58 PM GMT
-  Document emailed to Kyle Alpers (kalpers@aecnm.com) for signature  
2025-01-10 - 2:45:18 PM GMT
-  Email viewed by Kyle Alpers (kalpers@aecnm.com)  
2025-01-13 - 9:48:28 PM GMT
-  Document e-signed by Kyle Alpers (kalpers@aecnm.com)  
Signature Date: 2025-01-13 - 9:49:17 PM GMT - Time Source: server
-  Agreement completed.  
2025-01-13 - 9:49:17 PM GMT

USE OF ROSWELL  
14 JAN 26 2025



## NEW MEXICO STATE LAND OFFICE

## WATER MONITORING EASEMENT

NO. WM-672

New-Issue

THIS AGREEMENT, effective on March 11, 2021 and dated this 26 day of July, 2021, made and entered into between the State of New Mexico Commissioner of Public Lands, acting trustee pursuant to the Act of June 21, 1910, 36 Stat. 557, ch. 310, § 10, (Commissioner), and Armstrong Energy Corporation, whose address is P.O. Box 1973, Roswell, NM 88202, (Grantee). This Water Monitoring Easement ("Easement") is not effective until signed by the Commissioner.

## 1. Grant of Easement

For good and valuable consideration, including the covenants herein, the Commissioner grants to Grantee a Water Easement for four (4) well-sites as herein defined, to be located within the following described area in Lea County ("Easement Land"):

Quarter-Quarter	Section	Township	Range	Number of Easement Acres
NW4NE4, NE4NE4	32	19S	35E	80

The monitoring wells permitted under this Easement are as follows:

SLO Well-Site Name	Lat Long in decimal degrees	OSE Well POD Number	Volume of Use
WPQSB20	32.623785, -103.475704	L-15106 POD1	<600gpy Per Well
WPQSB21	32.622871, -103.474462	L-15106 POD2	
WPQSB22	32.622958, -103.477066	L-15106 POD3	
WPQSB23	32.621827, -103.475712	L-15106 POD4	

A well-site is one half (0.5) acre with the denominated well in the center. Depending on their proximity, well-sites may overlap. The area of this granted easement is calculated based on 0.5 acres multiplied by the total number of well sites shown above.

## 2. Purpose and Approved Use

This Easement is for the purpose of allowing Grantee's placement of monitoring well(s) for the benefit of the trust and for the following specific purpose: pursuant to the requirements of Corrective Action 1RP-5090 issued by NMOCD on June 13, 2018 to monitor groundwater. This grant of Easement entitles Grantee to the exclusive use of the easement for the permitted purposes and to install such improvements as are necessary to those purposes for the term of this easement.



This Easement does not entitle Grantee to divert water, or to develop or put to beneficial use any water rights. The Commissioner may permit other uses on or within this Easement to the extent that they do not impair Grantee's permitted purposes.

### **3. Term of Easement**

#### **A. Term**

This Water Easement is for a term of five (5) years, commencing on **March 11, 2021** ("Anniversary Date"), and expiring **March 10, 2026**, unless terminated earlier as provided herein.

#### **B. Renewal**

Upon Grantee's written request submitted to the Commissioner at least sixty (60) days prior to the expiration of this Easement, the parties may renew this Easement if the Commissioner, in the Commissioner's sole discretion, determines such renewal to be in the best interests of the trust.

#### **C. Reversion to Commissioner**

At such time that this Water Easement expires, is not renewed, or is otherwise terminated, or if Grantee has failed to use the Easement Land for the permitted purposes for a period of one (1) year, the Easement Land shall *ipso facto* revert to the Commissioner who may, in the Commissioner's sole discretion, thereafter make this Water Easement, with improvements, if any, available for further use. The Commissioner shall give Grantee notice of this said non-renewal by registered mail and no further notice or action on the Commissioner's part shall be required. Any loss of any kind, arising from the non-renewal of this Easement is acknowledged and accepted by Grantee as a business risk and Grantee's acknowledgement and acceptance shall be considered an inducement by Grantee to the Commissioner to enter into this Water Easement, shall not be considered a "taking" of any rights or property of Grantee, and shall not be the basis of any action at law or in equity to recover damages of any kind.

### **4. Grantee Standard of Care**

Grantee shall act prudently in drilling wells and performing water monitoring. "Prudent" within the context of this provision means that standard of care, operating and action of a reasonable water user acting pursuant to provisions of New Mexico water law and any other applicable laws, rules, and regulations. When Grantee has completed monitoring use of the well, Grantee will plug the well and provide Commissioner written evidence of having done so.

### **5. Permits and Reporting**

#### **A. Permit to Drill and Copies**

Prior to drilling, Grantee shall obtain a permit to drill a well with no water right (Permit) for each well included in this Easement from the New Mexico Office of the State Engineer (OSE). The Permit application must name the Commissioner of Public Lands as co-applicant and indicate that the well is to be located on land owned by the New Mexico State Land Office. Grantee shall send the Commissioner a copy of all applications for a Permit or correspondence related to the applications contemporaneously with any OSE filing, and shall send to the Commissioner a copy of any and all OSE response(s), Permits, or other communication(s) regarding Permit within ten (10) days of receipt. Grantee shall comply with all applicable laws pertaining to, and with all rules and regulations and procedures of, any other state agency having proper jurisdiction over the water.

#### **B. Monitoring Reports**

Grantee shall provide to the Commissioner copies of all interim and final reports created using data collected from the wells permitted under this Easement.



**C. Commissioner Participation in Filing**

The Commissioner, in the Commissioner's discretion, may assist Grantee in any filings or proceedings before the OSE. However, the Commissioner may withhold approval of any filings with the OSE, may withdraw participation or approval of any joint filing with the OSE, and may contest or challenge any filing (even if the Commissioner was previously a joint applicant or party to the filing), if the Commissioner determines that a filing is not or is no longer in the best interest of the trust. At the written request of the Commissioner, Grantee shall withdraw any filing with the OSE.

**6. Documentation**

As soon as practicable, Grantee shall furnish to the Commissioner copies of records, reports and plats of its operation, produced during the term of this Easement, including but not limited to water quality tests, well logs, drill cores, meter readings, and any data relating to hydrology and geological formations.

**7. Amendment**

This Easement shall not be altered, changed, or amended except by a written instrument executed by both the Commissioner and Grantee. An amendment is required to add wells to or remove wells from this Easement, or to establish rights-of-way or install improvements outside of the Easement Land. Each such amendment application shall be accompanied by the filing fee set forth in the Commissioner's current schedule of fees, and an annual rental payment per well, to be calculated and due as described in Paragraph 11.

**8. Rights-of-way**

Grantee shall have the right, without further consideration, to establish such rights-of-way upon the Easement Land as are reasonably necessary to the Purpose and Approved Use of the Easement, to install or maintain any necessary equipment or facilities on the Easement Land. Grantee shall not establish any rights-of-way or install any improvements outside of the Easement Land without an amendment to this Easement. It is Grantee's sole responsibility to notify and obtain in advance the approval of any surface lessee for any right-of-way. The Commissioner reserves the right to require such rights-of-way to be moved when the development or other use of the surrounding trust lands require this. Rights of way outside the Easement Land will be granted by the Commissioner, in the Commissioner's discretion. No right-of-way, or other access across, or use of any lands other than those expressly granted in this Easement is implied or expressed.

**9. Surveys**

Grantee shall survey each well site as soon as practicable after drilling, and submit a copy of the survey plat when completed to the Commissioner.

**10. Improvements****A. Authorized Improvements**

Grantee may make or place such improvements and equipment upon or under the Easement Lands as are reasonably necessary to the purpose of the Easement, subject to the requirements for removal of improvements and equipment set forth in Paragraph C below. No pipelines shall be installed, and no water right shall be developed or used under this Easement. All Grantee improvements such as well housing, piping, casing, and related equipment installed or obtained by Grantee on the granted Easement shall remain Grantee's sole property and liability. All such improvements shall be subject to the lien described in NMSA 1978 § 19-7-34. Grantee shall submit a written request for approval from the Commissioner prior to making any changes or additions to Authorized Improvements on the Easement Land. At the request of the Commissioner, Grantee shall submit updated survey plats showing such changes or additions.

**B. Unauthorized Improvements**

In the event that improvements not authorized by the Commissioner are placed on or under the Easement Land, at the Commissioner's discretion, such improvements may thereafter be deemed forfeited to the Commissioner and for purposes of Sections 19-7-14 and 19-10-28 NMSA 1978, no payments shall be due pursuant to those sections for such remaining improvements, or the Commissioner may order the removal, at Grantee's expense, of such improvements and the restoration of the Easement Land to its condition existing prior to the placement of said improvements.

**C. Removal of Improvements or Equipment**

Upon the termination, expiration or assignment of Grantee's interest in this Easement, Grantee may remove all such improvements, but only to the extent that such removal will not cause material injury to the Easement Land, and provided that all sums due to the Commissioner have been paid and that such removal is accomplished within sixty (60) days of the date of termination, expiration or assignment; or, Grantee may sell its interest in such physical improvements to a subsequent grantee or assignee. Any such sale or removal shall be subject to the Commissioner's paramount statutory lien. The Commissioner may, in writing, consent to Grantee leaving designated improvements upon the Easement Land, and such improvements shall thereafter be deemed forfeited to the Commissioner, and no payments for such remaining improvements shall be due under Sections 19-7-14 and 19-10-28 NMSA 1978. Any other improvements not removed or sold by Grantee shall continue to be Grantee's sole property and liability, shall be deemed in trespass, and shall give rise to such remedies for trespass and waste as may be available to the Commissioner at law or in equity. The Commissioner may extend the 60-day period upon good cause shown.

**11. Payment of Rental****A. Annual Rental**

Grantee shall pay annual rental in the amount of **\$2,000.00 (\$500.00 per monitoring well)** to be due on or before the Anniversary Date **March 11<sup>th</sup>** of each year. If this Easement is relinquished, cancelled or otherwise terminated prior to the end of the term set forth above, the annual rental shall not be prorated, reduce or refunded for any part of any year during which the Easement is in effect.

**B. Payment Submittal**

Payment of all sums due hereunder shall be made payable to "Commissioner of Public Lands" and shall include the State Land Office Water Easement number **WM-672**, and shall be submitted to the Director of Oil Gas Minerals Division, New Mexico State Land Office, 310 Old Santa Fe Trail, P.O. Box 1148, Santa Fe, New Mexico 87504-1148.

**12. Receipt of Monies:****A. Receipt of Monies**

No receipt of monies, including rental, by the Commissioner from Grantee, or any other person acting for or on Grantee's behalf, after termination or expiration of this Easement shall reinstate, continue, or extend the Term; affect any notice previously given to Grantee; operate as a waiver of the Commissioner's right to enforce payment of any rent or other monies due or thereafter falling due; or, operate as waiver of the right of the Commissioner to recover possession of the Easement Land by legal action.

**B. Acceptance of Payment**

Grantee understands that the Commissioner's receipt of any monies is governed by the New Mexico State Land Office Rules. Grantee agrees that the Commissioner's negotiation of Grantee's

check or other means of payment, and crediting the proceeds of such instrument to a suspense account, does not constitute acceptance of Grantee's payment.

**C. Application of Payments**

The Commissioner shall have the right to apply any payments made by Grantee to satisfy Grantee's obligations to the Commissioner in any order at the Commissioner's sole discretion, and without regard to Grantee's instructions as to the application of any such payment or part thereof, whether such instructions are endorsed on Grantee's check or otherwise, unless the Commissioner and Grantee otherwise agree, in writing, before the Commissioner accepts such payment. The Commissioner's acceptance of a check or payment by Grantee or others on Grantee's behalf shall not, in any way, affect Grantee's obligations hereunder nor shall it be deemed an approval of any assignment or subletting of this Water Easement.

**13. Signage**

Grantee shall post on each well a sign with Grantee's name, Easement number, State Land Office well number, OSE permit number and location by legal description.

**14. Site Security and Fencing**

Any and all site security of any kind for Grantee, Grantee's agents, employees or invitees, the Easement Land, or any personal property thereon shall be the sole responsibility and obligation of Grantee, and shall be provided by Grantee at Grantee's sole cost and expense. Grantee agrees to provide reasonable security for the Easement Land and all construction areas within the Easement Land consistent with standard industry practices and in conformity with Grantee's duty to prevent waste and trespass. If the Commissioner requires or approves in advance in writing, Grantee will furnish proof to the Commissioner that required or approved fencing is completed and in good repair.

**15. Reclamation**

Grantee agrees to reclaim by grading, levelling or terracing all areas disturbed by its activities on the Easement Land, and to landscape such areas at its own cost and expense. A Reclamation Plan must be submitted to and approved by Grantor prior to implementation. Grantor will not release Grantee from its responsibility for reclamation and revegetation until all work described in the Reclamation Plan has been completed and Grantor has performed an inspection on the Easement Land. The goal of the Reclamation Plan shall be to achieve native plant cover and diversity levels equal to or exceeding the natural potential levels in undisturbed soils adjacent to the project area. The Reclamation Plan shall include the following:

**A. Narrative**

The Reclamation Plan shall include a narrative describing all reclamation activities including removal of debris and equipment.

**B. Re-Vegetation Requirements**

A detailed description of the seed mix (native seed only), seeding rate/acre, method of dispersal, timing of dispersal, follow up monitoring plan, a re-seeding plan if initial efforts are unsuccessful, and a plan for addressing noxious weeds shall all be included in the Reclamation Plan. All seed mixtures submitted for approval shall specify pounds of pure live seed per acre. The seed shall contain no primary or secondary noxious weeds. Commercially sold seed shall be either certified or registered seed. The Noxious Weed component of the Reclamation Plan should include identification of the species of concern and the methods used to eradicate those species from the site. Eradication techniques may include mechanical treatment, chemical treatment, follow-up and monitoring. A Final Report is required on implementation and completion of the Reclamation that includes a brief narrative of the seeding and monitoring efforts and photos of the



reclaimed area. Once Grantee has submitted the Final Report and the Grantor has approved the work, Grantor will provide acknowledgment that reclamation requirements have been met.

#### **16. Compliance with State Land Office Rules and Other Laws**

Grantee shall comply with all applicable laws pertaining to, and with all rules and regulations and procedures of, the OSE where the State Engineer has jurisdiction over the monitoring wells. Grantee shall fully comply with all federal, state and local laws, rules, regulations, ordinances and requirements applicable to the Easement Land or to Grantee's operations thereon, including but not limited to all applicable laws governing water; endangered or threatened species; hazardous materials; environmental protection; land use; health and safety; cultural, historic or archeological / paleontological properties; waste; trespass, and the New Mexico Cultural Properties Act, NMSA 1978, 18-6-1 et seq. Such agencies are not to be deemed third party beneficiaries hereunder; however, this clause is enforceable by the Commissioner as herein provided or as otherwise permitted by law. Grantee shall comply with all New Mexico State Land Office Rules and Regulations, 19.2 NMAC, including those that may be hereafter promulgated. Grantee's obligations under this paragraph include but are not limited to compliance with NMSA 1978 Section 19-6-5, requiring a lessee of State Trust Land to protect the Easement Land from waste or trespass. Grantee's compliance with all laws, regulations and policy shall be at its own expense.

#### **17. Relinquishment**

##### **A. Relinquishment**

Grantee may, with the Commissioner's approval, relinquish this Easement provided that Grantee is in compliance with all terms of this Easement, including the payment of all rentals due, and if all improvements made pursuant to the Easement on, for, or appurtenant to the Easement Land have been approved by the Commissioner and arrangements satisfactory to the Commissioner have been made for either their removal or retention. Grantee may request relinquishment of all or any part of the Easement Land by filing relinquishment forms prescribed by the Commissioner and paying the relinquishment fee in the Commissioner's schedule of fees. Granting the request is at the discretion of the Commissioner.

##### **C. No Release of Liability or Obligations**

Grantee shall not, by relinquishment, avoid or be released from any liability for known or unknown waste or damage to the Easement Land, including environmental damage arising from, or in connection with, Grantee's use or occupancy thereof. Likewise, by relinquishment Grantee shall not be relieved of or discharged of obligations accrued by Grantee as of the date of relinquishment, including the obligation to reclaim the surface, revegetate the surface, pay the rentals required under Paragraph 11 and indemnify the Commissioner in accordance with the terms of this Easement.

##### **D. No Refunds for Relinquishment**

Upon any relinquishment, Grantee shall not be entitled to the refund of any rental previously paid.

#### **18. Assignment or Sublease**

Grantee shall not assign or sublease any rights granted hereunder, any part thereof, any portion of the Easement Land or any improvements located on the Easement Land without the prior amendment of this Water Easement pursuant to Paragraph 7 to permit such sublease or assignment, payment of the fee provided in the Commissioner's schedule of fees, and completion of required forms indicating the Commissioner's consent. Grantee may assign this Water Easement in whole only. The assignee shall succeed to all of the rights and privileges of Grantee

hereunder and shall be held to have assumed all of the duties and obligations of Grantee to the Commissioner (including payments of rentals up to and after the date of the assignment), except that the Commissioner reserves the right to increase the annual rental and percent rental to be payable by the assigned under Paragraph 11. No such assignment or sublease shall attempt to convey any permanent interest in Water Rights. Any sublease or assignment without Water Easement amendment shall be null and void.

### **19. Collateral Assignment**

Grantee shall obtain approval of the Commissioner before making any collateral assignment or mortgage of its interest in this Easement or its improvements, and any such collateral assignment or mortgage shall be subject to the conditions, limitations and requirements set forth in the State Land Office rules. The Commissioner's approval of a collateral assignment or mortgage shall not release Grantee from any of its obligations under this Easement, except as agreed to in writing by the Commissioner. If the Commissioner gives Grantee a notice of default, the Commissioner shall simultaneously provide a copy of the notice to an approved collateral assignee or mortgagee, which shall have the right to cure the default within the time provided, subject to the requirements of State Land Office rules. An approved collateral assignee or mortgagee may succeed to the rights and duties of Grantee, and it may assign the Water Easement in accordance with Paragraph 18, and State Land Office Rules governing assignments.

### **20. Grantee Breach and Cancellation**

The Commissioner may terminate this Water Easement for breach of any term or covenant of this Easement. Any substantial deviation in water quantity or water quality, if reasonably attributable to Grantee, or any change in the purpose of the Easement from that stated herein, shall constitute grounds for the Commissioner, in the Commissioner's sole discretion, to terminate, amend, modify, renegotiate, cancel or otherwise change this Easement; provided, however, that the Commissioner shall mail to Grantee, by certified mail, addressed to the mailing address of Grantee shown in the Commissioner's current records, a thirty (30) day notice of intention to alter or terminate, specifying the reasons for which the notice is given. Proof of mailing, but no proof of receipt of notice, shall be necessary, and thirty (30) days after such mailing this Easement shall terminate *ipso facto* without further notice or proceeding required of the Commissioner; provided, however, there shall be no termination and reversion if Grantee has previously made arrangements satisfactory to the Commissioner to discharge or resolve the breach.

### **21. Holding Over**

Upon termination or expiration of this Easement, any act or conduct of Grantee, including, but not limited to, the unapproved entry upon, occupancy, or use, whether continuous or not, of all or any part of the Easement Land by Grantee, Grantee's agents, or by any unauthorized improvements or other improvements required or ordered to be removed upon termination or expiration shall constitute Holding Over. At the termination or expiration of this Easement, Grantee immediately shall deliver possession to the Commissioner. In the event of Grantee's Holding Over, Grantee shall pay the Commissioner from time to time, upon demand, as rental for the period of any hold over, to be due for each day of such hold over, an amount equal to two hundred percent (200%) of the annual rent. Nothing contained herein shall be construed as a grant to Grantee of the right to hold over or otherwise enter the Easement Land for any purpose after the expiration or termination of this Easement without the prior written approval of the Commissioner. At any time that Grantee is holding over, the Commissioner shall, without requirement of further notice or grace period, have any and all rights to evict or otherwise remove Grantee by force or

otherwise, with all costs and fees incurred in such action to be due and payable by Grantee. This Section shall survive the termination or expiration of this Easement.

## 22. Bond

Prior to commencement of operations under this Easement. Grantee shall obtain the Commissioner's approval of and file a bond with the Commissioner in the amount of one thousand dollars (\$1,000.00) to secure payment to the Commissioner of such damage as may occur to livestock, range, water, crops or tangible improvements on the subject lands as may result from Grantee's use and occupation under this Easement. Such bond shall be payable for the term of this Easement, and may be utilized for reclamation of disturbed lands following the operations of Grantee under this Easement. Payment under this paragraph is to be made to the Commissioner and not to any other party. Grantee's bond shall not be liquidated damages, and the Commissioner reserves the right to pursue any other remedy for damages available at law or in equity.

## 23. Indemnification

Grantee shall hold harmless, indemnify and defend the State of New Mexico, the Commissioner and the Commissioner's employees, agents, and contractors, and beneficiaries, in both their official and individual capacities, from any and all liabilities, claims, losses, damages, or expenses, including but not limited to reasonable attorneys' fees, loss of land value, third party claims, penalties or removal, remedial or restoration costs arising out of, alleged to arise out of or indirectly connected with a) the operations hereunder of Grantee or Grantee's employees, agents, contractors, or invitees, b) any hazardous materials located in, under, or upon or otherwise affecting the Easement Land or adjacent property, or c) the activities of third parties on the Easement Land, whether with or without Grantee's knowledge or consent. In the event that any action, suit or proceeding is brought against Grantee, Grantee shall, as soon as practicable but no later than two (2) days after it receives notice thereof, notify the legal counsel of the Commissioner and the Risk Management Division of the New Mexico General Services Department by certified mail. This paragraph shall survive the termination, cancellation or relinquishment of this Water Easement, and any cause of action of the Commissioner to enforce this provision shall not be deemed to accrue until the Commissioner's actual discovery of said liability, claim, loss, damage, or expense.

## 24. Insurance

During the Term of this Water Easement, Grantee shall, at Grantee's cost and expense and at no cost to the Commissioner, insure all improvements against liability to third parties and for construction risks, in accordance with industry standards for the estimate probable loss. Grantee's insurance carriers shall be in good standing, adequately underwritten, and duly licensed to issue insurance policies in New Mexico. Grantee shall provide the Commissioner proof of insurance. In addition, Grantee shall obtain at its own expense, insurance coverage adequate to protect its operations, property, employees and agents in amounts Grantee finds sufficient. Grantee shall be solely responsible for obtaining insurance policies that provide coverage for losses of Grantee-owned property, including improvements. The Commissioner shall not be required to provide such insurance coverage or be responsible for payment of Grantee's costs for such insurance.

## 25. No Waiver by Commissioner

No employee or agent of the Commissioner has the power, right, or authority to orally waive any of the conditions, covenants, or agreements of this Easement; and no waiver by the Commissioner of any of the conditions, covenants, or agreements of this Easement shall be effective unless in writing and executed by the Commissioner. The Commissioner's waiver of Grantee's breach or default of any of the conditions, covenants, or agreements hereof shall not



constitute or be construed as a waiver of any other or subsequent breach or default by Grantee. The failure of the Commissioner to enforce at any time any of the conditions, covenants, or agreements of this Easement, or to exercise any option herein provided, or to require at any time performance by Grantee of any of the conditions, covenants, or agreements of this Easement shall not constitute or be construed to be a waiver of such conditions, covenants, or agreements, nor shall it affect the validity of this Easement or any part thereof, or the Commissioner's right to thereafter enforce each and every such condition, covenant, or agreement.

#### **26. Scope of Agreement**

This Easement incorporates all the agreements, covenants, and understandings between the Commissioner and Grantee concerning the subject matter hereof and all such agreements, covenants, and understandings are merged into this Easement. No prior agreement or understanding between the Commissioner and Grantee shall be valid or enforceable unless expressly embodied in this Easement.

#### **27. Non-impairment**

Nothing in this Easement is to be construed to allow the impairment of the rights of any lawful holder, present or future, of any geothermal resources, or any mineral, grazing, commercial, easement, or Water Rights on the subject or any other state trust lands.

#### **28. Severability**

In the event that any provision of this Easement is held invalid or unenforceable under applicable law, this Easement shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

#### **29. Successors In Interest**

All terms, conditions, and covenants of this Easement and all amendments thereto shall extend to and bind the permitted heirs, successors, and assigns of Grantee and the Commissioner. There are no third party beneficiaries of this Easement.

#### **30. Dispute Resolution, Applicable Law and Venue**

Any disputes arising under or in connection with this Easement shall be first resolved by mandatory contest pursuant to 19.2.15 NMAC. Subsequent appeal, if any, shall be in the First Judicial District Court of Santa Fe. In all instances, the law of New Mexico shall apply. The laws of the State of New Mexico shall govern this Easement, without giving effect to the conflict of law provisions of the State of New Mexico. Grantee consents to venue and jurisdiction in the District Court in and for the County of Santa Fe, State of New Mexico for purposes of any appeal pursuant to 19.2.15 NMAC, and to service of process under the laws of the State of New Mexico in any action relating to this Easement or its subject matter.

#### **31. Time**

Time is of the essence in the performance of each and every provision of this Easement. Grantee's failure to perform any or all of its obligations under this Easement in a timely manner shall be a breach of this Easement.

#### **32. Singular And Plural**

Whenever the singular is used herein, the same shall include the plural.

#### **33. Headings And Titles**

The use of section or paragraph headings and titles herein is for descriptive purposes only and is independent of the covenants, conditions, and agreements contained herein.



**34. No Joint Venture**

The Commissioner is not and will not be construed or held to be a partner, joint venturer or associate of Grantee in the conduct of the business of Grantee. The Commissioner will not be liable for any debts incurred by Grantee in the conduct of the business of Grantee. The relationship between the Commissioner and Grantee is, and will remain, solely that of the Commissioner and Grantee.

**35. No Commissioner Personal Liability**

In the event of a court action, Grantee shall not seek damages from the Commissioner or any employee of SLO or the State of New Mexico in their individual capacity. This Section shall survive termination of this Easement.

**36. Stipulations**

This easement is being issued with the expectation that all fees, bond(s) and requested data and information has been submitted or will imminently be received by the State Land Office. Should a subsequent audit of this easement reveal any of the above stated items have not been submitted, the New Mexico State Land Office will issue a letter to you requiring that you come into compliance, and the easement holder shall have 30 days to submit the missing item(s) or this easement may be terminated.

- Comply with the DSL CCAA Conservation Measures.
- Consider siting westernmost well location outside of shinnery dune habitat.
- Conduct migratory bird nesting surveys 5-7 days prior to construction during March 1<sup>st</sup>- August 31<sup>st</sup>.
- Comply with the relevant NMSLO BMPs whenever possible.

**37. Notices**

Written notice by registered or certified U.S. Postal Service, return receipt requested, or delivered by reputable overnight courier, return receipt of tracking system, to the addresses of the party hereunder shall constitute sufficient notice to comply with the terms of this Easement. Notice will be deemed effective upon delivery. Either the Commissioner or Grantee may change its respective address as provided in this Section effective three (3) business days after giving written notice of the change to the other. The addresses for notice are:

**Notice to the Commissioner:**

New Mexico Commissioner of Public Lands  
Attn: Oil Gas Minerals Division  
P.O. Box 1148  
Santa Fe, New Mexico 87504-1148  
Tel: (505) 827-5760

DSE DII ROSWELL NM  
14 JAN '25 AM 11:42

With copy to:  
New Mexico State Land Office  
General Counsel  
P.O. Box 1148  
Santa Fe, NM 87504-1148  
Tel: (505) 827-5756

RECEIVED 21 JAN 2025

**Notice to Grantee:**

Armstrong Energy Corporation

Attn: Ronald D. Hillman

P.O. Box 1973

Roswell, NM 88202

Phone: 575-625-2222

Email: rhillman@aecnrm.com

OSE DII ROSWELL NM  
14 JAN '25 AM 11:42

12/17/2025 2:24:37 PM

IN WITNESS WHEREOF, the Commissioner of Public Lands and Grantee have signed this Easement to be effective on the date signed by the Commissioner.

**GRANTEE:**

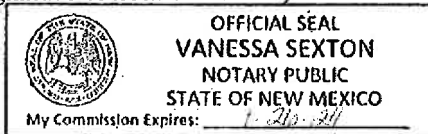
ARMSTRONG ENERGY CORPORATION

By: Ronald D. HillmanDate: 7/12/21Name: Ronald D. HillmanTitle: Vice President and General CounselACKNOWLEDGMENT IN A REPRESENTATIVE CAPACITYState of New MexicoCounty of ChavesThis instrument was acknowledged before me on July 12, 2021 (date) byRonald D. Hillman (name) asVice President and General Counsel (title) of Armstrong Energy Corporation

(name of party on behalf of whom instrument is executed).

Vanessa Sexton  
(Signature of notarial officer)

(seal)

My commission expires: 1-26-24OSE DII ROSWELL NM  
14 JAN '25 AM 11:42**GRANTOR**

NEW MEXICO COMMISSIONER OF PUBLIC LANDS

S  
E  
A  
LS. Garcia Richard / GB

Stephanie Garcia Richard, Commissioner of Public Lands

Dated: 7/26/21

Elizabeth K. Anderson, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 776659  
File Nbr: L 15833

Feb. 10, 2025

KYLE ALPERS  
ARMSTRONG ENERGY  
P.O. BOX 1973  
ROSWELL, NM 88201

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

- \* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- \* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- \* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- \* You, the permittee, are required to email nm.driller@ose.nm.gov with the following information when the driller is enroute to the drilling site: OSE Permit number, POD number, physical address, driller company and license number, and date/time driller is to be on site.
- \* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website [www.ose.nm.gov](http://www.ose.nm.gov).

Sincerely,

A handwritten signature in black ink that reads "Vanessa Clements".

Vanessa Clements  
(575) 622-6521

Enclosure

File No. **L-15833 Pcd1-3****NEW MEXICO OFFICE OF THE STATE ENGINEER****WR-07 APPLICATION FOR PERMIT TO DRILL****A WELL WITH NO WATER RIGHT**

(check applicable boxes):

For fees, see State Engineer website: <https://www.ose.nm.gov/>

Purpose: ☐ Pollution Control And/Or Recovery ☐ Ground Source Heat Pump  
☐ Exploratory Well\*(Pump test) ☐ Construction Site/Public Works Dewatering ☐ Other(Describe):  
☒ Monitoring Well ☐ Mine Dewatering

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

\*New Mexico Environment Department-Drinking Water Bureau (NMED-DWB) will be notified if a proposed exploratory well is used for public water supply.

☐ Yes ☒ No Angled/Directional borehole - include schematic and azimuth, inclination, measured depth and true vertical depth.☐ Temporary Request - Requested Start Date: Requested End Date:Plugging Plan of Operations Submitted? ☐ Yes ☒ NoNote: if there is known artesian conditions, contamination or high mineral content at the drilling location, include the borehole log or a well log from an existing well at that location. If this information is not submitted, check box and attach form WD-09 to this form. ☐**1. APPLICANT(S)**

Name: Armstrong Energy		Name:	
Contact or Agent: Kye Alpers	check here if Agent <input type="checkbox"/>	Contact or Agent:	check here if Agent <input type="checkbox"/>
Mailing Address: P.O. Box 1973		Mailing Address:	
City: Roswell		City:	
State: New Mexico	Zip Code: 88201	State:	Zip Code:
Phone: (575) 626-2727 Phone (Work):	<input type="checkbox"/> Home <input type="checkbox"/> Cell	Phone: Phone (Work):	<input type="checkbox"/> Home <input type="checkbox"/> Cell
E-mail (optional): kalpers@aecnrm.com		E-mail (optional):	

FOR OSE INTERNAL USE

Application for Permit, Form WR-07, Rev 10/02/2024

File No.: <b>L-15833</b>	Trn. No.: <b>776659</b>	Receipt No.: <b>2-47615</b>
Trans Description (optional): <b>MON</b>		
Sub-Basin: <b>L</b>	PCW/LOG Due Date: <b>1-22-2026</b>	

Page 1 of 3

**2. WELL(S)** Describe the well(s) applicable to this application.

**Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84). District II (Roswell), District V (Aztec) and District VII (Cimarron) customers, provide a PLSS location in addition to above.**

☐ NM State Plane (NAD83) (Feet)
 ☐ UTM (NAD83) (Meters)
 ☒ Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)

☐ NM West Zone
 ☐ Zone 12N

☐ NM East Zone
 ☐ Zone 13N

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	-Public Land Survey System (PLSS) (QQQSection, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name	Well Depth in feet	Casing Diameter (OD)
L-15833 Pod 1 SB-5R	103°28'33.4	32°37'23.1	NE NW NE Sec. 32 T19S R35E	32	2"
L-15833 Pod 1 SB-7R	103°28'32.6	32°37'22.6	NE NW NE Sec. 32 T19S R35E	32	2"
L-15833 Pod 1 SB-24	103°28'32.3	32°37'23.7	NE NW NE Sec. 32 T19S R35E	32	2"

**NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)**

Additional well descriptions are attached: ☐ Yes ☒ No If yes, how many \_\_\_\_\_

Other description relating well to common landmarks, streets, or other:

Well is on land owned by: New Mexico State Land Office

**Well Information: NOTE: If casings telescope or involve nested casing, please provide diagram. Attached?** ☐ Yes ☒ No

Approximate depth to water (feet): 18 Outside diameter of well casing (inches): 2.375

Driller Name: Jackie D. Atkins ( Atkins Engineering Associates Inc.) Driller License Number: 1249

**3. ADDITIONAL STATEMENTS OR EXPLANATIONS**

See attached approval Monitoring Well Easement from the New Mexico State Land Office. If more information is needed please contact Faith Crosby -505.827.5849

FOR OSE INTERNAL USE

Application for Permit, Form WR-07 Version 10/02/2024

File No.: L-15833

Trm No.: 776659

Page 2 of 3



**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<p><b>Exploratory*:</b> Is proposed well a future public water supply well? <input type="checkbox"/> Yes <input type="checkbox"/> NO If Yes, an application must be filed with NMED-DWB, concurrently. <input type="checkbox"/> Include a description of any proposed pump test, if applicable.</p> <p><b>Monitoring*:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.</p>	<p><b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.</p>	<p><b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.</p> <p><b>Ground Source Heat Pump:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.</p>	<p><b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for Mine De-Watering, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water. <input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.</p>
--	---	--	---

(\* if exploration or monitoring drilling activity is required by NMED, then you must also submit the NMED Work Plan)

#### ACKNOWLEDGEMENT

I, We (name of applicant(s)), Kye Alpers on behalf of Armstrong Energy Corp.

Print Name(s)

affirm that the foregoing statements are true to the best of (my,our) knowledge and belief.

*Kye Alpers*

Applicant Signature

Applicant Signature

#### ACTION OF THE STATE ENGINEER

This application is:

☒ approved

☐ partially approved

☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 22nd day of January, 20 25, for the State Engineer,

Elizabeth K. Anderson, P.E., State Engineer

By: K. Parekh  
Signature

Kashyap Parekh  
Print

Title: Water Resources Manager I  
Print



FOR OSE INTERNAL USE

Application for Permit, Form WR-07 Version 10/02/2024

File No.: L-15833

Trm No.: 776659

Page 3 of 3



**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE**

**SPECIFIC CONDITIONS OF APPROVAL**

- 17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.
- 17-1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: L 15833 POD1-3

File Number: L 15833

Trn Number: 776659

page: 1

**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE**

**SPECIFIC CONDITIONS OF APPROVAL (Continued)**

- 17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- 17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- 17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.  
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.
- 17-Q The State Engineer retains jurisdiction over this permit.
- 17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

Trn Desc: L 15833 POD1-3

File Number: L 15833

Trn Number: 776659

**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE**

**SPECIFIC CONDITIONS OF APPROVAL (Continued)**

LOG      The Point of Diversion L 15833 POD1 must be completed and the Well Log filed on or before 01/22/2026.

LOG      The Point of Diversion L 15833 POD2 must be completed and the Well Log filed on or before 01/22/2026.

LOG      The Point of Diversion L 15833 POD3 must be completed and the Well Log filed on or before 01/22/2026.

IT IS THE PERMITTEE'S RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

**ACTION OF STATE ENGINEER**

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 01/14/2025	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 22 day of Jan A.D., 2025

Elizabeth K. Anderson, P.E., State Engineer

By: K. Parekh

KASHYAP PAREKH



Trn Desc: L 15833 POD1-3

File Number: L 15833

Trn Number: 776659



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
[www.atkinseng.com](http://www.atkinseng.com)

02/06/2025

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Addition to Application to Drill a Well with No Water Right for West Peral Queen Site

To whom it may concern:

Atkins Engineering Associates, Inc. (AEA) on January 14<sup>th</sup>, 2025 submitted Application to Drill a Well with No Water Right witch check # 40104 for West Peral Queen Site. An updated landowner access agreement is attached for the permit. The wells for this permit will be under NMOSE File # L-14876, Starting with POD- 15. Please find, in triplication, a landowner access agreement.

If you, have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: As noted above.

OSE DII ROSWELL, NM  
6 FEB '25 PM 1:33



Stephanie Garcia Richard, Commissioner of Public Lands  
State of New Mexico

2025 FEB -4 PM 9:54

NEW MEXICO STATE LAND OFFICE  
WATER EASEMENT  
AMENDMENT

NO. WM-672

Amendment #1

THIS AMENDMENT, dated this 6th day of February, 2025, is made and entered into between the State of New Mexico Commissioner of Public Lands, acting trustee pursuant to the Act of June 21, 1910, 36 Stat. 557, ch. 310, § 10, (Commissioner), and Armstrong Energy Corporation, whose address is P.O. Box 1973, Roswell, NM 88202 (Grantee). This Amendment is not effective until signed by the Commissioner.

1. Water Easement WM-672 is amended according to the *West Pearl Queen Stage 1 Abatement Plan Site Investigation (NMOCD reference: NOY181664460946)* and as follows:

Four (4) monitoring wells were removed from Easement WM-672 within the following easement location in Lea County:

<i>Quarter-Quarter</i>	<i>Section</i>	<i>Township</i>	<i>Range</i>	<i>Number of Easement Acres</i>
N2NE4	32	19S	35E	80
<i>Well ID</i>	<i>GPS Coordinates</i>	<i>OSE Well File</i>	<i>OSE Well POD Number</i>	
WPQSB20	32.623785, -103.475704	L-15106	L-15106 POD1	
WPQSB21	32.622871, -103.474462	L-15106	L-15106 POD2	
WPQSB22	32.622958, -103.477066	L-15106	L-15106 POD3	
WPQSB23	32.621827, -103.475712	L-15106	L-15106 POD4	

OSE DII ROSWELL NM  
6 FEB '25 PM 1:33

Two (2) temporary bores were made permanent as monitoring wells and shall be added to Easement WM-672. The wells are on pad (previously disturbed ground) and within the following easement location in Lea County:

<i>Quarter-Quarter</i>	<i>Section</i>	<i>Township</i>	<i>Range</i>	<i>Number of Easement Acres</i>
N2NE4	32	19S	35E	80
<i>Well ID</i>	<i>GPS Coordinates</i>	<i>OSE Well File</i>	<i>OSE Well POD Number</i>	
SB-2	32.622669, -103.475828	L-14876	L-14876 POD2	
SB-14	32.623078, -103.475494	L-14876	L-14876 POD14	

Three (3) monitoring wells shall be installed on Easement WM-672 on pad (previously disturbed ground) within the following easement location in Lea County:

<i>Quarter-Quarter</i>	<i>Section</i>	<i>Township</i>	<i>Range</i>	<i>Number of Easement Acres</i>
N2NE4	32	19S	35E	80
<i>Well ID</i>	<i>GPS Coordinates</i>	<i>OSE Well File</i>	<i>OSE Well POD Number</i>	
SB-5R	32.623083, -103.475944	L-14876	L-14876 POD15	
SB-7R	32.622944, -103.475722	L-14876	L-14876 POD16	
SB-24	32.623250, -103.475639	L-14876	L-14876 POD17	

2. The annual rent of \$2,500.00 for 5 well sites (\$500.00 for each monitoring well site), shall be due for this easement on each anniversary date of March 11<sup>th</sup>.
3. Stipulations
  - All work must be performed on pad and on previously disturbed ground.
  - Grantee shall submit approved NMOSE Well Files and POD Numbers when available.
4. Except as set forth in this Amendment, the Water Easement is unaffected and shall continue in full force and effect in accordance with its terms. If there is conflict between this Amendment and the Water Easement or any earlier amendment, the terms of this Amendment will prevail.

USE DILL RUSWELL NM  
6 FEB '25 PM 1:59

2025 FEB -4 PM 9:54

IN WITNESS WHEREOF, the Commissioner of Public Lands and the Grantee have signed this Amendment to be effective on the date signed by the Commissioner.

**GRANTEE:**

ARMSTRONG ENERGY CORPORATION

By: KGRDate: 1/31/25ACKNOWLEDGMENT IN A REPRESENTATIVE CAPACITYState of NEW MEXICOCounty of CHAVESThis instrument was acknowledged before me on 1/31/25 (date) byKYLE ALPERS (name) asVice President of Engineering (title) ofArmstrong Energy Corporation  
(name of party on behalf of whom instrument is executed).[Signature]  
(Signature of notarial officer)

(seal)

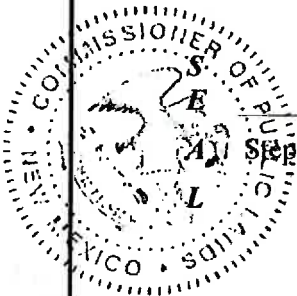
My commission expires: 2/3/27

STATE OF NEW MEXICO  
NOTARY PUBLIC  
RACHAEL CEDERBERG  
Commission Number 1139629  
My Commission Expires 3rd day of February 2027

2025 FEB -4 AM 9:54

**GRANTOR:**S. GRANT/GRDated: 2/6/25

Stephanie Garcia Richard, New Mexico Commissioner of Public Lands

OSE DII ROSWELL NM  
6 FEB '25 PM:33



Appendix C – Surveyor-Stamped Data Table



2904 W 2nd St.  
 Roswell, NM 88201  
 voice: 575.624.2420  
 fax: 575.624.2421  
 www.atkinseng.com

### West Pearl Queen Injection MW Survey


Atkins Engineering Associates, Inc. (AEA) has completed the survey at the West Pearl Queen Injection Site, 1RP-5090, Lea County, New Mexico. The Site is located approximately at latitude 32.62257 and longitude -103.475628 in Lea County, New Mexico.

The following table summarizes the coordinate and elevation data for the new groundwater sampling wells, top-of-casing (TOC) north side, and adjacent ground.

Description	Northing (USft)	Easting (USft)	Latitude (DD)	Longitude (DD)	Elevation Top of Casing (USft)	Elevation Adjacent Ground (USft)
MW-2	591323.20	805345.85	32.62266980	-103.47582846	3739.31	3736.44
MW-5R	591475.32	805313.52	32.62308861	-103.47592947	3738.23	3735.14
MW-7R	591424.53	805381.95	32.62294750	-103.47570856	3737.98	3734.81
MW-14	591472.52	805447.81	32.62307794	-103.47549341	3738.27	3735.04
MW-24	591502.42	805409.27	32.62316097	-103.47561779	3738.25	3735.23
TBM	591155.83	805430.29	32.62220793	-103.47555861	3737.61	--

Horizontal coordinates are in US Survey Feet NAD 83 (2011) (EPOCH:2010.0000) New Mexico State Plane East Grid Coordinates, scaled to ground with a combined scale factor 1.0001865347887380997.

Elevations (Orthometric Heights) for groundwater sampling wells established using RTK GPS observations tied to TBM. TBM is the top of a corner of a 2" pipe fence that has an established Orthometric Height of 3737.61 feet NAVD88 and was determined using GPS observations tied to NGS Benchmark "R 97" with a published Orthometric Height of 3894.17 feet NAVD88.

  
 Ryan C. Cortez, PS 22761

3/14/2025  
 Date (Signed)



## Appendix D – Monitor Well Records and Field Sheets



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

3/19/2025

District II  
New Mexico Office of State Engineer  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered on the date of this letter to the DII Office of the State Engineer*

Re: *Well Records & Log* for monitoring wells; L-15833 POD15-17

To whom it may concern:

Enclosed please find in duplicate, *Well Records* for West Pearl Queen Site L-15833 POD15-17

If you, have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: As noted above.



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)


1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-15 (SB-5R)		WELL TAG ID NO. N/A		OSE FILE NO(S). L-15833		
	WELL OWNER NAME(S) Armstrong Energy				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS P.O. Box 1973				CITY Roswell	STATE NM	
					ZIP 88201		
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 37	SECONDS 23.12	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
	LONGITUDE 103	28	33.35	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE NW NE Sec. 32 T17S R35E, NMPM West Pearl Queen							
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.	
	DRILLING STARTED 2/24/2025	DRILLING ENDED 02/25/2025	DEPTH OF COMPLETED WELL (FT) 26	BORE HOLE DEPTH (FT) ±26	DEPTH WATER FIRST ENCOUNTERED (FT) ±23		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 23.5	DATE STATIC MEASURED 02/27/2025	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM	TO					
	+3	11	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154
	11	26	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	FROM	TO					
	0	1	±8.5	Quik Crete 5000 PSI	±4.9	from surface	
	1	6	±8.5	Type I/II Neat Cement	3.8	auger	
	6	9	±8.5	Bentonite Pellets	±1.0	auger	
	9	26	±8.5	Silica Sand	±4.7	auger	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	4	4	Sand, fine-grained, poorly graded, unconsolidated, Brown (7.5 yr 5/8)	Y    ✓ N	
	4	12	8	Sand, med/fine-grained, poorly graded, semi-consolidated, Light Brown (7.5 yr 6/4)	Y    ✓ N	
	12	16	4	Sand, med/fine-grained, poorly graded, semi-consolidated, Pink (7.5 yr 7/4)	Y    ✓ N	
	16	25	9	Clay, Stiff, High Plastic, Friable with fine-grained sand, Red Brown (7.5 yr 7/6)	✓ Y    N	
	25	26	1	Clay, Stiff, waxy, Brown/Purple, (Red Bed)	✓ Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):	
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Completed as above ground completion vaults, no pump test, duration until no longer needed.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  <div style="display: flex; justify-content: space-between;"> <div>             Jackie D. Atkins            Jack Atkins (Mar 19, 2025 10:55 MDT)         </div> <div>03/19/2025</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div> <div>DATE</div> </div>					

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-16 (SB-7R)		WELL TAG ID NO. N/A		OSE FILE NO(S). L-15833			
	WELL OWNER NAME(S) Armstrong Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 1973				CITY Roswell	STATE NM	ZIP 88201	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 37	SECONDS 22.61 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	28	32.55 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE NW NE Sec. 32 T17S R35E, NMPM West Pearl Queen								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 2/24/2025	DRILLING ENDED 02/25/2025	DEPTH OF COMPLETED WELL (FT) 25		BORE HOLE DEPTH (FT) ±25	DEPTH WATER FIRST ENCOUNTERED (FT) ±24		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 24.0	DATE STATIC MEASURED 02/27/2025		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER – SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	+3	10	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	10	25	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.010
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	1	±8.5	Quik Crete 5000 PSI	±4.9	from surface		
	1	5	±8.5	Type I/II Neat Cement	±3.8	auger		
	5	8	±8.5	Bentonite Pellets	±1.0	auger		
	8	25	±8.5	Silica Sand	±5.8	auger		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)		ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO			Y	N	
	0	4	4	Sand, fine-grained, poorly graded, unconsolidated, Brown (7.5 yr 5/8)	Y	✓ N	
	16	16	12	Sand, med/fine-grained, poorly graded, semi-consolidated, Light Brown (7.5 yr 6/4)	Y	✓ N	
	16	20	9	Sand, med/fine-grained, poorly graded, semi-consolidated, Pink (7.5 yr 7/4)	Y	✓ N	
	20	25	5	Clay, Stiff, High Plastic, Friable with fine-grained sand, Red/Yellow, moist	✓ Y	N	
	25	26	1	Clay, Stiff, waxy, Brown/Purple, (Red Bed)	✓ Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):		
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION: Completed as above ground completion vaults, no pump test, duration until no longer needed.						
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Cameron Pruitt						
6. SIGNATURE	<p>THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:</p> <p> Jackie D. Atkins 03/19/2025</p> <p>SIGNATURE OF DRILLER / PRINT SIGNEE NAME DATE</p>						

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE DT ROSWELL NM  
19 MAR '25 PM 4:19

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-17 (SB-24)		WELL TAG ID NO. N/A		OSE FILE NO(S). L-15833			
	WELL OWNER NAME(S) Armstrong Energy				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 1973				CITY Roswell	STATE NM	ZIP 88201	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 37	SECONDS 23.38 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	28	32.23 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE NW NE Sec. 32 T17S R35E, NMPM West Pearl Queen								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 2/24/2025	DRILLING ENDED 02/26/2025	DEPTH OF COMPLETED WELL (FT) 26		BORE HOLE DEPTH (FT) ±26	DEPTH WATER FIRST ENCOUNTERED (FT) ±24		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 24.7	DATE STATIC MEASURED 02/27/2025		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER – SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	+3	11	±8.5	2" Sch 40 PVC Riser	Flush Tread 2 TPI	2.067	0.154	--
	11	26	±8.5	2" Sch 40 PVC Screen	Flush Tread 2 TPI	2.067	0.154	0.010
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>* (if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	1	±8.5	Quik Crete 5000 PSI	±4.9	from surface		
	1	6	±8.5	Type I/II Neat Cement	±3.8	auger		
	6	9	±8.5	Bentonite Pellets	±1.0	auger		
	9	26	±8.5	Silica Sand	±4.7	auger		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

#### 4. HYDROGEOLOGIC LOG OF WELL

## 5. TEST; RIG SUPERVISION

## 5. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO.	POD NO.	TRN NO.	
LOCATION	WELL TAG ID NO		PAGE 2 OF 2








# WR-20 Well Record and Log\_packet -forsign

Final Audit Report

2025-03-19

Created:	2025-03-19
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAWRDqqIjs8Pw4ExvltF_WynU4C52xYF9X

## "WR-20 Well Record and Log\_packet -forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2025-03-19 - 2:35:08 PM GMT
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2025-03-19 - 2:36:33 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2025-03-19 - 4:46:41 PM GMT
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2025-03-19 - 4:55:49 PM GMT - Time Source: server
-  Agreement completed.  
2025-03-19 - 4:55:49 PM GMT

OSE DIT ROSWELL NH  
19 MAR '25 4:14

2/24/25 a/c w/pea drl-24

TL- 7:06 - 111346 \ F450  
TA- 9:15 - 111455 - F450

9:46 - Rig up on MW-7R to DPT

9:48 (0-4)

9:51 (4-8)

9:54 (8-12)

9:56 (12-16)

10:00 (16-20) Sleeve stuck

~~cl (20-24)~~

~~(24-28)~~

~~(28-32)~~

10:58 - Pull tooling & switch to augers

11:18 (0-4) 11:24

Sand

11:28 (4-9) 11:36

Sand

11:39 (9-14) 12:08

Sand/gravel

12:11 (14-19) 13:00

Sand/gravel/clay

~~(19-24)~~

13:29 - Switch back to DPT & sample

13:30 (20-24)

13:42 Pull tooling, Leave augers @ 19'

2/25/25 15:07 - Big rig up on MW-7R

15:15 (19-24) 15:45 Sand/clay/gravel

Run split spoon @ 23'-25', Hit Redbed @ 25'

16:00 (24-25) 16:15

16:21 - Land casing to 25' - 15' of .10 slot

16:24 - Land Sand to 8'

★ 11 bags ★

17:05 - Land Hole plug to 5' & Hydrate ★ 1.5 buckets ★

Clean augers

TL- 17:47 - 111509 \ F450

TA- 19:03 - 111517 \ F450

2/26/25

TL- 6:21 - 111540 \ F450

TA- 7:05 - 111565 \ F450

2/26/25

8:11 - Start grout w/mix

8:55 - End ★ 3 bags of grout ★

WL- 23.08 TD- 25.00

13:17 - Start Development

★ 2 gallons pumped

16:57 - End, will return

~~WL- CP~~ ~~TD- CP~~

13:28 - De-watered, Let stand, pulled 1 gallon

14:00 - No water, Move to next well

16:25 - Continue

16:28 - Dry, Let sit

15:45 - Start surface completion w/ bollards

16:28 - End

★ 11 bags of 4000 ★

★ 2 bags of sand ★

★ 4 bags of fast setting ★

2/27/25

8:06 - Start development

8:17 - End ★ 3 total gallons purged ★

Final WL- 27.00 TD- 28.00

Casing 3' AGS



2/24/25 Accwpea-drl-242  
13:59 Rig up on MW-24 to DPT  
14:03 (0-4)  
14:08 (4-8)  
14:11 (8-12)  
14:15 (12-16)  
14:23 (16-20) Rejection  
14:30 Pull tooling

2/26/25 7:36 Rig up w/ Big rig  
7:45 (0-4) 7:50 Sand  
7:54 (4-9) 7:58 "  
8:03 (9-14) 8:05 " / Caliche  
8:08 (14-19) 8:12 " "  
8:15 (19-24) 8:30 sand / clay Sample<sup>23</sup> rejection  
9:14 (24-26) 9:57 Redbed/gravel drill to 24' take  
Sample spoon 24'-26' had Redbed from 25'-26'

10:00 Land casing to 26'  
10:05 Land sand to 9' ★ 9 bags ★  
11:00 Land Hole plug + 6' ★ 1.5 buckets ★  
11:13 End Hydrate  
12:21 Start grout w/ mix ★ 3 bags of grout ★  
12:55 End

WL-23.20 TD-25.70  
14:14 Start Development  
15:10 End ★ 3 gallons Purged ★  
WL-24.82 TD-25.70  
14:27 Dehydrated, Let sit, 2.5 gallons  
14:57 Continue

16:43 Start Surface Completion  
17:13 End ★ 10 bags of 4000 ★  
Final WL-26.50 TD-28.80  
Casing 3' AGS  
TL-17:23-111565 F450  
TA 18:50-111590

2/27/25  
TL-6:43-111591 F450  
TA-7:26-111615  
7:38 Start bollard install  
8:20 End ★ 2 bags of sand ★  
★ 4 bag of fast setting ★



2/24/25 Decw pea-drl-24

14:40 - Rig up on MW-SR to DPT  
14:42 (0-4)  
14:44 (4-8)  
14:50 (8-12)  
14:53 (12-16)  
14:56 (16-20)  
15:03 (20-24) Rejection  
15:11 - Pull tooling  
TL- 16:36 - 111455 - F450  
TA- 18:13 - 111484 - F450

2/25/25

TL- 6:30 - 111484 - F450  
TA- 7:15 - 111509 - F450

7:40 - Rig up on MW-SR to auger

7:43 - Test Kill switches

7:51 (0-4) 7:59 Sand/gravel

8:07 (4-9) 8:26 Sand/gravel

8:29 (9-14) 9:09 " " Switch to Kerry

9:14 (14-19) 9:25 " "

9:29 (19-24) 9:57 clay/sand

9:59 (24-29) 10:20 Redbid Take spoon sample @ 26'  
CP (29-37)

10:25 - Land casing to 26' BGS

10:27 - Land sand to 9'

11:39 - Land Hole plug to 6' 5' Hydrate

12:58 - Bentonite bridge, pull casing & Redrill

13:49 - Reland casing to 26' - 15' of 0.10 slot

13:51 - Reland sand to 26' 9' ★ 9 bags ★

14:34 - Reland Hole plug to 6' Hydrate ★ 1.5 buckets ★

TL

2/26/25

7:41 - Start grout w/ mix

WL - 23.57

8:58 - End

TD - 25.80

★ 23 bags of grout ★

2/26/25

WL - 23.32 TD - 25.80

17:02 - Start development

17:06 - End, will return ★ 2 gallons purged ★  
CP ~~wt~~ CP ~~fl~~

17:21 - Rewatered after 1 gallon, let recharge to 5.5' CP

17:02 - Start, no water, let sit, go to other well

17:36 - 15:27 - Continue

15:40 - Dry, let sit

17:36 - Start surface completion w/ ballards

15:00 - End ★ 13 bags of 4000 ★

★ Casing 3' AGS ★ ★ 2 bags of sand ★

CP ★ 4 bags of fast setting ★

Final WL - CP ~~fl~~

2/27/25

7:37 - Start development

8:00 - End ★ 35 Total gallons purged

Final WL - 27.70 TD - 28.76

TL - 9:18 - 111615 - F450

TA - 11:45 - 111725

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oecd/contact-us>

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS

Action 535766

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 535766
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
shanna.smith	Well Installation Report is satisfactory.	12/22/2025