NSL

Initial

Application

Received: 10/02/20

NSL - 8089 *Pag*Revised March 23, 2017 P.O. No. WGQXT-201002-NSL000

 $^{\text{RECEIVED:}}10/02/20$

REVIEWER: LRL TYPE: NSL

APP NO:

pLEL2027663009

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Geological & Engineering Bureau -



1220 South St. Francis Drive,	Santa Fe, NM 8/505
ADMINISTRATIVE APPLI THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE	
REGULATIONS WHICH REQUIRE PROCESSING	
Applicant: Armstrong Energy Corporation	OGRID Number: 1092
Well Name: Ruth 20 #2	API: 30-025-36866
Pool: Shoe Bar; Wolfcamp, North	Pool Code: 56295
SUBMIT ACCURATE AND COMPLETE INFORMATION F	
1) TYPE OF APPLICATION: Check those which apply A. Location – Spacing Unit – Simultaneous Dedi NSL NSP(PROJECT AREA)	
B. Check one only for [1] or [11] [1] Commingling – Storage – Measurement DHC DTB PLC PC [11] Injection – Disposal – Pressure Increase – WFX PMX SWD IPI	OLS OLM - Enhanced Oil Recovery EOR PPR FOR OCD ONLY
2) NOTIFICATION REQUIRED TO: Check those which A. Offset operators or lease holders B. Royalty, overriding royalty owners, revenue C. Application requires published notice D. Notification and/or concurrent approval E. Notification and/or concurrent approval F. Surface owner G. For all of the above, proof of notification H. No notice required	apply. De owners De owners De owners De owners De owners Application Content Complete De owners De owners De owners Application Content Complete
3) CERTIFICATION: I hereby certify that the informati administrative approval is accurate and complet understand that no action will be taken on this approval notifications are submitted to the Division.	te to the best of my knowledge. I also
Note: Statement must be completed by an individ	ual with managerial and/or supervisory capacity.
	10-2-20
Brian Wood	Date
Print or Type Name	
B. Wood	Phone Number
Signature	brian@permitswest.com e-mail Address



NON-STANDARD LOCATION (NSL) APPLICATION ARMSTRONG ENRGY CORPORATION RUTH 20 #2 API 30-025-36866 523' FNL & 841' FWL SECTION 20, T. 16 S., R. 36 E., LEA COUNTY, NM

I. This existing Lovington; Upper Penn, West (40750) oil well is on NM State Land Office (NMSLO) surface and NMSLO oil and gas lease V0-4719-0002 (120 acres) that comprises the N2NW4 & SWNW of Section 20. The well is standard for the Lovington; Upper Penn, West.

Armstrong (OGRID 1092) has isolated the Upper Penn and plans to develop the Shoe Bar; Wolfcamp, North (56295). Their Wolfcamp APD pack is attached as Exhibit A.

The well is non-standard (too far east) for the Shoe Bar; Wolfcamp, North. Pool rules require such a well to be within 150' of the center of the quarter-quarter. The well is 31' too far east. In Armstrong's opinion, it is not economical to develop the Wolfcamp by drilling a new or directional well at or to a standard location.

Armstrong will dedicate 160 acres to the Wolfcamp via a pending communitization agreement. All 160 acres will be comprised of two NMSLO leases (V0-4719-0002 and A0-1469-0012) with common working and royalty interests.

II. Forms C-102 showing the well, current 40 acre Upper Penn dedication, and proposed 160 acre Wolfcamp dedication are attached as Exhibit B.

Exhibit C shows the NMSLO lease boundaries and Wolfcamp wells and acreage dedications. The only existing and bordering or cornering Wolfcamp dedication is the SW4 of Section 20.

III. Lease boundaries (all State) are shown on EXHIBIT C. The well encroaches to the east, toward the interior of the communitization agreement. Only offset bordering or cornering Wolfcamp well is to the south. Its dedication boundary is 2117' south. This information is current and correct.

- IV. Exhibit C shows the proposed NSL well, existing dedications, and leases.
- V. Archaeology is not an issue.
- VI. The need to prevent waste, recover additional reserves, and minimize surface use drives the need for this nonstandard location. One existing well bore tapping a second zone in a low-price environment will recover additional reserves and prevent waste by minimizing development costs.
- VII. Armstrong does not believe directional drilling to a standard location is cost effective for this project. The Wolfcamp drilling window does not overlay the well.
- VIII. Armstrong is the operator of the 160-acre dedication toward which the well will encroach. Working and royalty interests are common and consolidated via a communitization agreement. Therefore, no notice is required.

Beloal		9-30-20
Brian Wood, Consultant		Date
STATE OF NEW MEXICO)	
COUNTY OF SANTA FE) SS:)	

The foregoing instrument was acknowledged before me this 30th day of September, 2020 by Brian Wood. Witness my hand and official seal.

Official Seal
ANDREA MARIA SCHAFER
Notary Public
State of New Mexico
My Comm. Expires 12/9/23

My Commission Expires: _____ 9December 2023

Business Address: 37 Verano Loop, Santa Fe NM 87508

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone. (575) 748-1283 Fax: (575) 748-9720 District III

1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

E-mail Address: kalpers@aecnm.com

Phone: 575-625-2222 ext. 305

Date: 9/10/20

State of New Mexico

Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-101 Revised July 18, 2013

☐AMENDED REPORT



Coperator Name and Address Amstrong Energy Corporation PO Box 1973							² OGRID Number 1092			
			PO Box 19 Roswell, NM	973 88202			30-025-36866	3 API Nun		
4. Prop	erty Code		***************************************	5 Property Ruth	Name	***************************************	1	6. Well No.		
	tro-dissorrand visional		name with the same of the same	7 Surface I		······································	·			
UL - Lot	Section	Township	Range			V/S Line	Feet From	E/W Line	County	
D	20	168	36E		23	N	841	W	Lea	
10 1		T1:-	.	* Proposed Bott		1		T	·····	
UL - Lot D	Section 20	Township 16S	Range 36E		from N	I/S Line N	Feet From 841	E/W Line W	County Lea	
and the same of th				" Pool Info	rmation					
	***************************************			Pool Name					Pool Code	
				Additional Well	Information	1	and the control of th			
	rk Type P		12. Well Type O	13. Cable	(1-	Lease Type S	15.	Ground Level Elevation	
	ultiple N		17. Proposed Depth	is Form		1	9 Contractor	3940 GR ^{20.} Spud Date		
Depth to Grou				Wolfcamp ce from nearest fresh water	well		Distance	to nearest surfa	ara water	
70 1000°+			1000'+							
⊠We will b	e using a c	losed-loop s	ystem in lieu of		d C D-					
Туре	Hole	Siza	220 27 10000	Proposed Casing and						
Surface	17		Casing Size 13.375"	Casing Weight/ft 48		Setting Depth Sacks of 448' 45			Estimated TOC 0'	
Int	17		8.625"	32		350'	450 1600		0'	
Prod	7.8		5.5"	17		700'	1600		6,000'	
				/Cement Program:					0,000	
Existing Ca	sing			1.0						
	v		22. I	Proposed Blowout P	revention Pr	ogram				
Type Working Pressure			Test Pressure			Manufacturer				
Annular and Double Ram 5000			5000							
3. I hereby ce	rtify that the	information g	iven above is true	and complete to the best						
of my knowle	dge and beli-	ef.		_	OIL CONSERVATION DIVISION			ISION		
further cert 9.15.14.9 (B Signature:	NMACE	ive complied , if applicable	with 19.15.14.9 (le.	A) NMAC 🗵 and/or	Approved B	y:				
rinted name:	Kyle Alpe	rs			Title:				***************************************	
Title: VP Engineering				Approved Date: Expiration Date:						

Conditions of Approval Attached





Ruth 20 #2 API 30-025-36866 Section 20 T16S R36E 523' FNL & 841' FWL Lea County, NM

Anticipated Plugback and Stimulation Procedure, with planned start date of 9/20/20

- 1. Install 10k frac tree/test day prior to frac fleet arrival
- MIRU tanks, water transfer, frac, and wireline
- 3. Perform perforations and fracturing procedure as per design on the following intervals:

Top Perf	Bottom Perf	No. of Holes	
11,307'	11,415′	36	
11,118'	11,294'	36	
11,100'	11,183'	36	
10,950'	11,096'	36	
10,523'	10,667'	30	

- 4. RDMO frac equipment, WL, and unnecessary tanks for drillout
- 5. RD crown valve and goat head
- 6. MIRU and test 2 3/8" CT w/mechanical connection
- 7. RU mechanical coil connector, dual BP valve, hydraulic disconnect, motor, 4 3/4" bit
- Drill out frac plugs (circulating), tag TOC above strawn plug @~11,430', circulate bottoms up, TOOH
- 9. RDMO CT unit
- 10. MIRU WL, set Arrowset packer with burst disc and on/off tool @ 10,700'
- 11. RDMO WL, frac tree
- 12. MIRU BOP and WO rig, test BOP and accumulator
- 13. RIH w/tubing/SN, sting into packer
- 14. Space out tubing, ND BOP, NU wellhead/production tree
- 15. RDMO pulling unit, clean location
- 16. MIRU flowback equipment (choke manifold, sand knockout, etc.), capable of RDMO w/out SI
- 17. Proceed with natural flowback, assess production for economics and install of artificial lift.

EXHIBIT A

District 1
1025 N French Dr., Hobbs, NM 88240
Phone (575) 393-0161 Fax (575) 393-0720
District II
811 S First St., Artesia, NM 88210
Phone, (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone, (505) 334-6178 Fax, (505) 334-6170
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505

Phone: (505) 476-3460 Fax. (505) 476-3462

LADI M. L

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

X AMENDED REPORT (plug back & add Wolfcamp)

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code Pool Name

30-025-36866	Fool Code 56295	roof Name	
Property Code 19457	⁵ Property Name RUTH 20		* Well Number
OGRID No. 1092 *Operator Name ARMSTRONG ENERGY ARMSTRONG ENERGY			⁹ Elevation 3940

Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line East/West line Feet from the County D 20 16 S 36 E 523 NORTH 841 WEST LEA "Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 12 Dedicated Acres Joint or Infill 4 Consolidation Code Order No. 160.00

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

523' -841'→Ŏ		17 OPERATOR CERTIFICATION 1 hereby cerufy that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleaved mineral interest in the land inclinding the proposed bottom hale location or has a right to drill this well at this location pursuant to a contract with an owner of such a numeral or working interest, it is a valuating puoling agreement or a compulsory pooling order peredicer emerged by the dividen. 9-29-20 Signature Printed Name Kalpers@aecnm.com E-mail Address
		usSURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 8-18-04 Date of Survey Signature and Seal of Professional Surveyor: Original survey by Gary L. Jones #7977 is on file with NMOCD. Certificate Number

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240

DISTRICT II 811 South First, Artesia, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

API Number

State of New Mexico

Energy, Minerals and Natural Resources Department



Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code 40750

1945		RUTH "20"				2			
0GRID No 14717			Operator Name CHESAPEAKE OPERATING INC.				Eleva		
			Surface Location						0'
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	20	16 S	36 E		523	NORTH	841	WEST	LEA
			Bottom	Hole Loc	cation If Diffe	rent From Sur	face (5027)		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	n Infill Co	onsolidation (18 C		
40	Joint 0	· mm Co	msomerion (Code Or	der No.	- /		33	
NO ALLO	WABLE W	TLL BE A	SSIGNED '	TO THIS	COMPLETION U	NTIL ALL INTER	ESTS HAVE BE	EN CONSOLIDA	TED
	/	OR A I	NON-STAN	DARD UN	IT HAS BEEN	APPROVED BY	THE DIVISION	,	
			***				OPERATO	R CERTIFICAT	ION
841'		·			1		I hereby	certify the the injusting the complete	formation
		Let.: N32°5 Long.: W10	4'48.1" 3°22'58.4"		1		best of my know	ledge and belief.	te to the
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	/ [Ì		1 Dre	nda of	man
1 7					+-		Signature Bren	da Coff	man
	i				1		Printed Name		0
	!				i		Title 190	Lalory U	navys
					!		Date	. 16,20	05
	i				ľ				
					i -		SURVEYO	R CERTIFICAT	ION
	1						I hereby certify on this plat was	that the well locations plotted from field	m shown
	i				1		actual surveys	made by me or that the same is	inder my
	ļ				i		correct to the	best of my belief.	.,
	1						AUGU	ST 18, 2004	
	<u>i</u>			<u></u>	·+-		Date Surveyed Signature & S Professional		
	!				į		Professional		
							NA	MY	mil
	į				1		W.O	No. 4562 2	1
	I				ļ			101	7977
							780	Gary L. Long	

EXHIBIT B

District 1
1025 N French Dr. Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

> X AMENDED REPORT (plug back & add Wolfcamp)

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-36866	² Pool Code 56295	SHOE BAR; WOLFCAMP, NORTH	
Property Code 19457		erty Name TH 20 Well Nu	
⁷ OGRID №. 1092	ARMSTRONG ENERGY CORPORATION		tion 10'
	m Cumfo	a Logation	

Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County D 20 16 S 36 E 523 NORTH 841 WEST LEA "Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 12 Dedicated Acres Joint or Infill 14 Consolidation Code ⁵ Order No. 160.00

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	and the second		
523'	2		"OPERATOR CERTIFICATION
Ψ	ı		I hereby cerufy that the information contained herein is true and complete
-841'→ ○			to the best of my knowledge and belief, and that this organization either
			owns a working interest or unleased mineral interest in the land including
			the proposed bottom hole location or has a right to drill this well at this
		*	location pursuant to a contract with an owner of such a inneral or working
			micrest, it is a valuatary pooling agreement or a compulsory pooling
			order perceptive emerged by the division.
			9-29-20
			Signature Date
		= 1	XYLE ALPERS
			Printed Name
	1		kalpers@aecnm.com
			E-mail Address
			"SURVEYOR CERTIFICATION
			I hereby certify that the well location shown on this
			plat was plotted from field notes of actual surveys
			made by me or under my supervision, and that the
			No. of the second secon
			same is true and correct to the best of my belief.
			8-18-04
			Date of Survey
			Signature and Seal of Professional Surveyor:
	1		**
			Original survey by
			Gary L. Jones #7977
			is on file with NMOCD.
			Certificate Number

