BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING APRIL 4, 2019

CASE No. 20331

Nandina Fed Com 25 36 31 No. 101H Well Nandina Fed Com 25 36 31 No. 103H Well Nandina Fed Com 25 36 31 No. 112H Well Nandina Fed Com 25 36 31 No. 114H Well Nandina Fed Com 25 36 31 No. 121H Well

LEA COUNTY, NEW MEXICO



STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION

APPLICATION OF AMEREDEV OPERATING, LLC FOR COMPULSORY POOLING AND APPROVAL OF A NON-STANDARD WELL LOCATION, LEA COUNTY, NEW MEXICO.

CASE NO. 20331

AFFIDAVIT OF BRANDON FORTEZA **IN SUPPORT OF CASE NO. 20331**

Brandon Forteza, of lawful age and being first duly sworn, declares as follows:

- My name is Brandon Forteza. I work for Ameredev Operating, LLC 1. ("Ameredev") as a Landman.
- 2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum land matters. My credentials as a petroleum landman have been accepted by the Division and made a matter of record.
- 3. I am familiar with the application filed by Ameredev in this case, and I am familiar with the status of the lands in the subject area.
- None of the uncommitted parties has indicated opposition to this pooling application, and therefore I do not expect any opposition at the hearing.
- 5. Ameredev is seeking an order pooling all uncommitted interests in the Wolfcamp formation [JAL; Wolfcamp, West] in the 640.40-acre horizontal spacing unit comprised of the W/2 of Section 30 and the W/2 of Section 31, Township 25 South, Range 36 East, NMPM. Lea County, New Mexico.
- 6. Ameredev seeks to dedicate the above horizontal spacing unit to the following proposed wells:

BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico

Hearing Date: April 4, 2019

- The Nandina Fed Com 25 36 31 No. 101H Well to be drilled from a surface hole location in the SW/4 SW/4 (Unit M) of Section 31 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 30;
- The Nandina Fed Com 25 36 31 No. 103H Well to be drilled from a surface hole location in the SE/4 SW/4 (Unit N) of Section 31 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 30;
- The Nandina Fed Com 25 36 31 No. 112H Well to be drilled from a surface hole location in the SW/4 SW/4 (Unit M) of Section 31 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 30;
- The Nandina Fed Com 25 36 31 No. 114H Well to be drilled from a surface hole location in the SE/4 SW/4 (Unit N) of Section 31 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 30; and
- The Nandina Fed Com 25 36 31 No. 121H Well to be drilled from a surface hole location in the SW/4 SW/4 (Unit M) of Section 31 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 30.
- 7. Ameredev has prepared draft Form C-102s to file with the Division for these proposed wells. Those C-102s are attached hereto as **Ameredev Exhibits A-1**, **A-2**, **A-3**, **A-4**, and **A-5**. The C-102s show that Pool Code 33813 has been assigned.
- 8. Incorporating the proximity tracts, the completed intervals for the proposed Nandina Fed Com 25 36 31 No. 101H, Nandina Fed Com 25 36 31 No. 103H, Nandina Fed Com 25 36 31 No. 112H, and Nandina Fed Com 25 36 31 No. 121H will comply with the Division's setback requirements.

- 9. The completed interval for the proposed Nandina Fed Com 25 36 31 No. 114H does not comply with the Division's setback requirements as it is too close to the east line.

 Ameredev is seeking an exception to the standard setbacks. Ameredev owns 100% of the working interest in the acreage that is being encroached upon to the East, and therefore additional notice was not necessary.
- 10. Because the proposed wells will be simultaneously drilled and completed,
 Ameredev requests an extension of the time period to drill and complete the initial well from 120 days to 365 days.
 - 11. There are no depth severances in the Wolfcamp formation.
- 12. Ameredev **Exhibit A-6** is an exhibit prepared by me that identifies the tracts of land comprising the proposed spacing and proration unit. This proposed spacing and proration unit includes federal and fee land This exhibit shows the interest owners and the percentage of their interest by tract. A unit recapitulation, showing the percentage of ownership interests in the proposed spacing and proration unit, is also included on the exhibit. Ameredev is seeking to pool the interest owners denoted by an asterisk.
 - 13. Ameredev is seeking to pool unleased mineral interest owners only.
- 14. A copy of the well proposal letter, along with the corresponding AFEs, is attached as **Ameredev Exhibits A-7**. The costs reflected in the AFEs are consistent with what Ameredev and other operators have incurred for drilling similar horizontal wells in the area.
- 15. Ameredev made good faith efforts to reach an agreement with the uncommitted interest owners, including by offering to lease the interests of the unleased mineral interest owners.

- 16. Ameredev seeks approval of overhead and administrative costs at \$7,000/month while drilling and \$700/month while producing. These costs are consistent with what Ameredev and other operators are charging in this area for these types of wells. Ameredev respectfully requests that these administrative and overhead costs be incorporated into any order entered by the Division in this case.
- 17. I provided the law firm of Holland & Hart LLP a list of names and addresses for the uncommitted interest owners. In compiling these addresses, Ameredev conducted a diligent search of all public records in the county where the proposed wells are located and of phone directories, including computer searches. Not all parties were locatable, but notice was also provided by publication in the Hobbs News-Sun.
- 18. Ameredev Exhibits A-1 through A-7 were either prepared by me or compiled under my direction and supervision.

BRANDON FORTEZA

STATE OF TEXAS
COUNTY OF Travis
SUBSCRIBED and SWORN to before me this 2019 by
Brandon Forteza.
NOTARY PUBLIC
My Commission Expires: 12/5/2020 GORDON G. GALLET Notary Public, State of Texas Comm. Expires 12-05-2020 Notary ID 130921617

12060559_1

Santa Fe, New Mexico

Exhibit No. A-1 Case No. 20331

Submitted by: AMEREDEV OPERATING, LLC

FORM C-102

State of New Mexico

Hearing Date: April 4, 2019

Revised August 1, 2011

Energy, Minerals & Natural Resources

•

Revised August 1, 201

RITS. 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

Phone: (575) 393-6161 Fax: (575) 393-0720

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

District II

Department SERVATION DIVISION

Submit one copy to appropriate

District Office

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

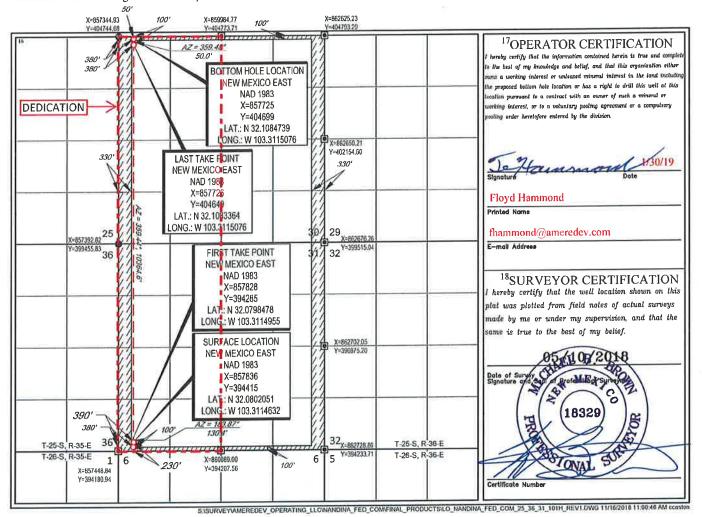
¹ API Number 30-025-	² Pool Code 33813	JAL; WOLFCAMP, WEST			
⁴ Property Code		roperty Name ED COM 25 36 31	*Well Number 101H		
⁷ OGRID No. 372224	-	perator Name OPERATING, LLC.	"Elevation 3022"		

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	31	25-S	36-E	-	230'	SOUTH	390'	WEST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section 30	Township 25-S	36-E	Lot Idn	Feet from the 50'	North/South line NORTH	Feet from the 380'	Enst/West line WEST	County LEA
12 Dedicated Acres	¹³ Joint or I	¹³ Joint or Infill ¹⁴ Consolidation Code		le li Ord					
640.40			C						



Santa Fe, New Mexico Exhibit No. A-2 Case No. 20331

Submitted by: AMEREDEV OPERATING, LLC

Hearing Date: April 4, 2019

FORM C-102

State of New Mexico

Energy, Minerals & Natural Resources Department

Revised August 1, 2011

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

Phone: (575) 393-6161 Fax: (575) 393-0720

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240

Submit one copy to appropriate

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

District Office

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

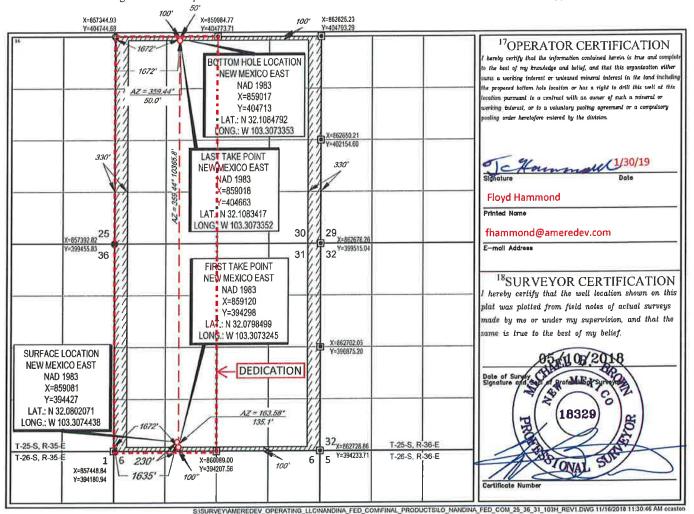
¹ API Numbe 30-025-	² Pool Code 33813			
Property Code		Property Name PED COM 25 36 31	⁵Well Number 103H	
⁷ OGRID No. 372224		Operator Name OPERATING, LLC.	Elevation 3018'	

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Enst/West line	County
N	31	25-S	36-E	-	230'	SOUTH	1635'	WEST	LEA

11 Bottom Hole Location If Different From Surface

			D	ottom mon	e Location II D	merent From Sui	Mec		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Enst/West Tine	County
C	30	25-S	36-E) - 1	50'	NORTH	1672'	WEST	LEA
^{[Z} Dedicated Acres	¹³ Joint or I	nfill ¹⁴ Co	nsolidation Code	15Order	· No.				
640.40			С						



Santa Fe, New Mexico Exhibit No. A-3

Case No. 20331 Submitted by: AMEREDEV OPERATING, LLC

Hearing Date: April 4, 2019

State of New Mexico

Energy, Minerals & Natural Resources

Revised August 1, 2011 Submit one copy to appropriate

Department OIL CONSERVATION DIVISION

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

811 S. First St., Artesia, NM 88210

<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

Phone: (575) 748-1283 Fax: (575) 748-9720

District Office

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

1220 South St. Francis Dr. Santa Fe, NM 87505

AMENDED REPORT

FORM C-102

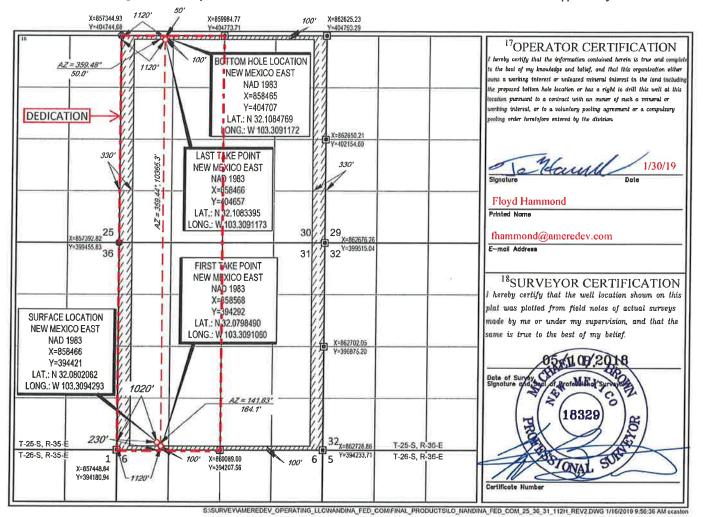
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	² Pool Code	³ Pool Name					
30-025-	33813	JAL; WOLFCAMP, WEST					
⁴ Property Code	⁵ Pr	operty Name	Well Number				
	NANDINA FE	ED COM 25 36 31	112H				
OGRID No.	⁸ O _I	perator Name	⁹ Elevation				
372224	AMEREDEV OPERATING, LLC.						
5 , 222 .		ton I contion	3023'				

Surface Location

175				11	Bottom Ho	le Location If D	ifferent From Su	-face			Ē
	4	31	25-S	36-E	-	230'	SOUTH	1020'	WEST	LEA	
Ш	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Enst/West line	County	Ü

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Enst/West line	County
1	30	25-S	36-E	_	50'	NORTH	1120'	WEST	LEA
⁷² Dedicated Acres	¹³ Joint or I	nfill HCc	nsolidation Co	de 15Ord	er No.				
640.40			C						



Santa Fe, New Mexico Exhibit No. A-4 Case No. 20331

Submitted by: AMEREDEV OPERATING, LLC

Hearing Date: April 4, 2019 **FORM C-102**

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

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

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

Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

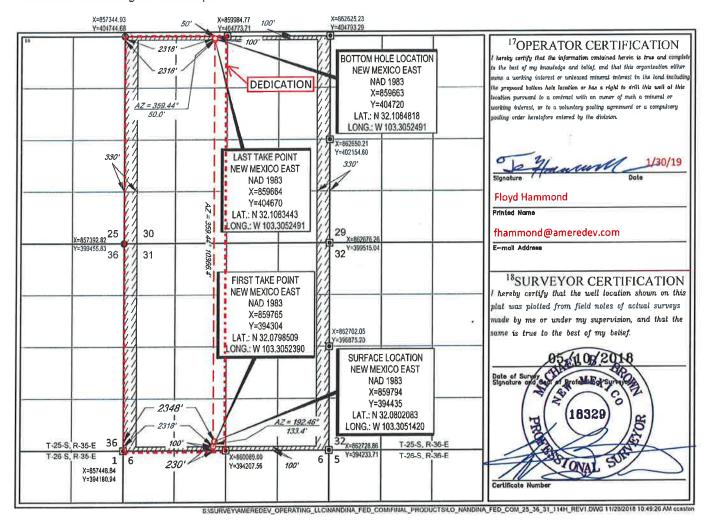
Santa Fe, NM 87505

API Number 30-025-	² Pool Code 33813	Jal; Wolfcamp, West			
⁴ Property Code		D COM 25 36 31	⁶ Well Number 114H		
⁷ OGRID No. 372224	•	OPERATING, LLC.	⁹ Elevation 3017'		

¹⁰Surface Location

				11	Bottom Ho	le Location If D	Different From Sui	face		
	N	31	25-S	36-E	-	230'	SOUTH	2348'	WEST	LEA
UL	or lot no.	Section	Township	Rnnge	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	

North/South line East/West line County Range Lot Ide Feet from the Feet from the UL or lot no. Sectio Township 2318' WEST LEA 50' NORTH 30 25-S 36-E Consolidation Code 12 Dedicated Acres Order No. ³Joint or Infill 640.40 С



Santa Fe, New Mexico Exhibit No. A-5 Case No. 20331

Submitted by: AMEREDEV OPERATING, LLC

Hearing Date: April 4, 2019

State of New Mexico

Revised August 1, 2011

Energy, Minerals & Natural Resources Department

Submit one copy to appropriate

Phone: (575) 748-1283 Fax: (575) 748-9720 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

811 S. First St., Artesia, NM 88210

District III

District Office

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

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

AMENDED REPORT

FORM C-102

WELL LOCATION AND ACREAGE DEDICATION PLAT

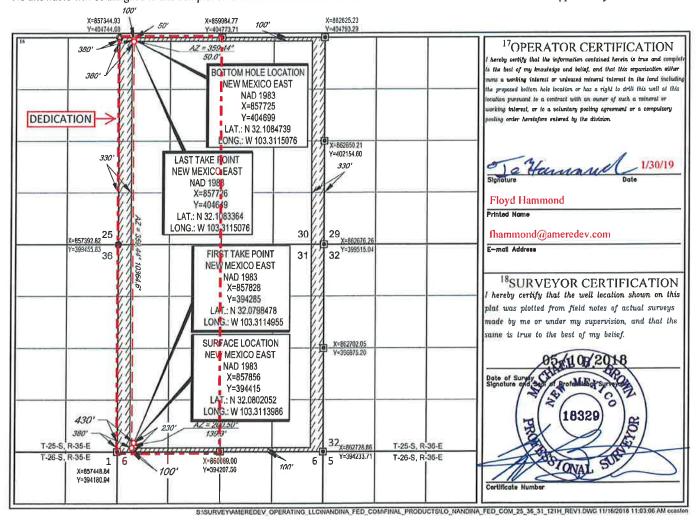
¹ APl Number 30-025-	² Pool Code 33813	JAL; WOLFCAMP, WEST		
Property Code	5p	⁵ Property Name		
⁷ OGRID No. 372224	⁸ O	operator Name OPERATING, LLC.	Elevation 3023'	

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Enst/West line	County
4	31	25-S	36-E	- 1	230'	SOUTH	430'	WEST	LEA

11 Bottom Hole Location If Different From Surface

UL or let no.	Section 30	Township 25-S	36-E	Lot Idn	Feet from the 50'	North/South line NORTH	Feet from the 380'	Enst/West line WEST	County LEA
12 Dedicated Acres	¹³ Joint or 1	nfill ^{[4} C	Consolidation Co	de ¹⁵ Ord	er No.				
640.40			С						



NANDINA FED COM 25-36-31 112H,121H,114H,101H,103H

T25S-R36E-SECTION 30, W2 T25S-R36E-SECTION 31, W2 LEA COUNTY, NEW MEXICO

Tract 1 NW4 159.95 Acres	
Tract 2 SW4 160.17 Acres	Sec 30
	35555
Tract 3 W2 320.28 Acres	
	Sec 31

NANDINA FED COM 25-36-31 112H,121H,114H,101H,103H

T25S-R36E-SECTION 30, W2 T25S-R36E-SECTION 31, W2 LEA COUNTY, NEW MEXICO

TRACT 1: W2NW4 SECTION 30 T25S-R36E	
A.H. COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE	0.83333333%
DONALD WOODS	0.51851990%
NANCY CAROLYN HALEY	0.41666667%
GENEVA LOUISE MAGARO	0.01388889%
HELEN HUDGENS FERRELL	0.01388889%
ROWENA LYNN DOSS	0.01388889%
KASSANDRA DAWN DITTMER	0.00540111%
NATHAN ALLAN DITTMER	0.00540111%
MARY ANN PRALL	0.91666667%
BLACKBEARD RESOURCES, LLC	0.01388889%
AMEREDEV NEW MEXICO, LLC	97.24845566%
Total	100.00000000%
TRACT 2: SW4 SECTION 30 T25S-R36E	400 00000000
AMEREDEV NEW MEXICO, LLC	100.00000000%
Total	100.00000000%
TRACT 3: W2 SECTION 31 T25S-R36E	
AMEREDEV NEW MEXICO, LLC	100.00000000%
Total	100.00000000%
UNIT RECAPITULATION	
T25S-R36E-SECTION 30, W2	
T25S-R36E-SECTION 30, W2	
*A.H. COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE	0.20813814%
*DONALD WOODS	0.12950852%
*NANCY CAROLYN HALEY	0.10406907%
*GENEVA LOUISE MAGARO	0.00346897%
*HELEN HUDGENS FERRELL	0.00346897%
*ROWENA LYNN DOSS	0.00346897%
*KASSANDRA DAWN DITTMER	0.00134901%
*NATHAN ALLAN DITTMER	0.00134901%
*MARY ANN PRALL	0.22895196%
*BLACKBEARD RESOURCES, LLC	0.00346897%
AMEREDEV NEW MEXICO, LLC	99.31275840%
TOTAL	100.00000000%

*Interest Seeking to Compulsory Pool

Ameredev II, LLC 5707 Southwest Parkway Building 1, Suite 275 Austin, Texas 78735



February 21, 2019

VIA Certified Mail

A.H. COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE 524 NW 42ND STREET OKLAHOMA CITY, OK 73118

RE:

Nandina Fed Com 25-36-31 #121H, #112H, #101H, #114H, and #103H Well Proposals

Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico

SHL: Section 31; BHL: Section 30

Dear Owner:

Ameredev Operating, LLC ("Ameredev"), as Operator, hereby proposes to commence to drill and complete the following wells, collectively referred to as "the Wells":

Nandina Fed Com 25-36-31 #121H Well Proposal

Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico

SHL: 230' FSL & 430' FWL Section 31; BHL: 50' FNL & 380' FWL Section 30

Formation: Wolfcamp MD: 22,431' TVD: 12,447'

Nandina Fed Com 25-36-31 #112H Well Proposal

Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico

SHL: 230' FSL & 1020' FWL Section 31; BHL: 50' FNL & 1120' FWL Section 30

Formation: Wolfcamp MD: 23,315' TVD: 12,103'

Nandina Fed Com 25-36-31 #101H Well Proposal

Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico

SHL: 230' FSL & 390' FWL Section 31; BHL: 50' FNL & 380' FWL Section 30

Formation: Wolfcamp MD: 21,750' TVD: 11,911'

Nandina Fed Com 25-36-31 #114H Well Proposal

Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico

SHL: 230' FSL & 2348' FWL Section 31; BHL: 50' FNL & 2318' FWL Section 30

Formation: Wolfcamp MD: 22,773' TVD: 11,959'

Nandina Fed Com 25-36-31 #103H Well Proposal

Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico

SHL: 230' FSL & 1635' FWL Section 31; BHL: 50' FNL & 1672' FWL Section 30

Formation: Wolfcamp MD: 22,782' TVD: 11,876'

Page 1 CONFIDENTIAL

Ameredev's records indicate A.H. COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE ("COLE") owns a 0.00208138 working interest in the Wells, and COLE's estimated costs associated with the Operation are approximately \$26,727.72, per well.

In addition, Ameredev proposes the Operation to be governed by the terms of the 2015 Horizontal AAPL Form 610 Operating Agreement ("OA") with the following terms:

- Contract Area consisting of Township 25 South, Range 36 East, Section 30 and Section 31: W2, with Ameredev listed as the Operator ("Contract Area")
- 100%/300%/300% non-consent risk penalties
- \$7,000/\$700 drilling and producing overhead rates

Ameredev looks forward to working with COLE on this matter. Please feel free to contact me at the information provided below with any questions. Please be advised that Ameredev may file for compulsory pooling in the near future, as such please indicate your election below and return to bforteza@ameredev.com at your earliest convenience.

Sincerely,

Brandon Forteza 737-300-4721

Election Ballot for the Nandina Fed Com 25-36-31 #121H Well Proposal (AFE# 2019-002) _____ COLE elects to participate in the proposed Operation by paying its proportionate share of the costs outlined in the AFE 2019-002. _____ COLE elects to not participate in the proposed Operation. A.H. COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE By: Its:

	Election Ballot for the Nandina Fed Com 25-36-31 #112H Well Proposal (AFE# 2019-001)
	COLE elects to participate in the proposed Operation by paying its proportionate share of the costs outlined in the AFE 2019-001.
	COLE elects to not participate in the proposed Operation.
A.H. (COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE
Ву:	
Its:	

Election Ballot for the Nandina Fed Com 25-36-31 #101H Well Proposal (AFE# 2019-003)
COLE elects to participate in the proposed Operation by paying its proportionate share of the cosmoutlined in the AFE 2019-003.
COLE elects to not participate in the proposed Operation.
A.H. COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE
By:
Its:

Election Ballot for the Nandina Fed Com 25-36-31 #114H Well Proposal (AFE# 2019-004)	
COLE elects to participate in the proposed Operation by paying its proportionate share of the cosmoutlined in the AFE 2019-004.	ts
COLE elects to not participate in the proposed Operation.	
A.H. COLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE	
By:	
Its:	

	Election Ballot for the Nandina Fed Com 25-36-31 #103H Well Proposal (AFE# 2019-005)
	COLE elects to participate in the proposed Operation by paying its proportionate share of the cost outlined in the AFE 2019-005.
	_ COLE elects to not participate in the proposed Operation.
A.H. C	OLE, A/K/A ALBERT H. COLE AND HELEN JEAN COLE
Ву:	
Its:	· ·



Lea County, New Mexico

SHL: Sec. 31 25S-36E 230' FSL & 390' FWL BHL: Sec. 30 25S-36E 50' FNL & 380' FWL

Nandina Fed Com 25-36-31 101H AFE # 2019-003 Capital Expenditure

February 21, 2019



Date Prepared	
February 21, 2019	

AFE Type	Project	Well No.	Field Name	Cost Center	AFE No.
Capital	Nandina Fed Com 25-36-31	101H	Delaware	40769	2019-003

Location	County	State	Well Type		
SHL: Sec. 31 25S-36E 230' FSL & 390' FWL	Loo	NM	Oil	Ехрі	
BHL: Sec. 30 25S-36E 50' FNL & 380' FWL	Lea	MIVI	Gas	Prod	

Estimate Type	Start Date	Completion Date	Formation	MD
Original				21,750'
Revised	August 25, 2019	October 24, 2019	Wolfcamp	TVD
Supplemental				11,911'

Project Description

Drill and Complete 2 Mile Wolfcamp Lateral and Tie In to Central Tank Battery.

Total Cost \$12,841,337.61

Comments on Associated Costs

Water disposal not included.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory, and well costs under term of the joint operating agreement, regulatory order, or other applicable agreement covering this well.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$20,000,000 (100% W.I.) of Combined Single Limit coverage for well control and related redrilling and clean-up/pollution expense covering drilling (through completion) with a \$250,000 (100% W.I.) retention.

Marketing Election

Ameredev sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Ameredev, you will be subject to all of the terms of such contracts. Upon written request to Ameredev, we will share with a volume to add conditions pursuant to which gas will be sold.

\Box	1	elect	to	take	my	gas	ın	Kind	١.

I elect to market my gas with Ameredev pursuant to the terms and conditions of its contracts.

Company	Approved By	Date



Intangibles	Code	Dry Hole Cost	After Casing Point Cost	Total Cost
MISC PREPARATION COSTS	0.004	\$ 20,000.00	\$	\$ 20,000.00
EASEMENT, ROW, AND ACQUISITION	0,006	\$ 100,000.00		\$ 100,000.00
ROAD / LOCATION PREP / RESTORATION	0,008	\$ 100,000.00	\$	\$ 100,000.00
DRILLING RIG	0.010	\$ 950,003.04	\$ 90,200.00	5 1,040,203.04
COIL TUBING	0.012	\$	\$ 130,000.00	5 130,000.00
FUEL	0.016	\$ 217,500.00	\$ 2,500.00	\$ 220,000.00
TRAILER, CAMP, AND CATERING	0.018	\$ 36,670.00	\$ 19,305.00	\$ 55,975.0
WATER & SEPTIC	0.020	\$ 68,850.00	\$	\$ 68,850.00
SURFACE RENTALS	0.024	\$ 86,630.00	\$ 73,020.00	\$ 159,650.00
DRILL BITS	0.028	\$ 87,000.00	\$ 3,500.00	\$ 90,500.00
DOWNHOLE RENTALS	0.030	\$ 17,775.00	\$ 81,700.00	\$ 99,475.00
DIRECTIONAL DRILLING	0,032	\$ 630,865.00	\$ 63,000,00	\$ 630,865.00 \$ 63,000.00
COMPOSITE PLUGS	0,034	\$ 10,803.50	\$ 63,000.00	\$ 10,803.5
TUBING & BHA INSPECT & REPAIR RENTAL TUBING	0,042	\$ 10,805.50	\$ 32,500.00	\$ 32,500.0
WELL CONTROL EQUIP / SERVICES	0,048	\$ 91,519.60	\$ 216,048.00	\$ 307,567.6
PUMP TRUCK / PRESSURE TESTING	0,054	\$ 91,519.60	\$ 1,000.00	\$ 1,000.0
MUD, ADDITIVES, AND CHEMICALS	0,060	\$ 303,920.00	\$ 312,400.00	\$ 616,320.0
FRAC PUMPING CHARGES	0,061	\$ 303,920,00	\$ 3,500,000.00	\$ 3,500,000.0
	0,062	\$ 43,600.00	\$ 724,500.00	\$ 768,100.0
WATER RIGHTS / TRANSFER / STORAGE SOLIDS CONTROL EQUIP / SERVICES	0.062	\$ 43,600.00	\$ 724,500.00	\$ 102,072.0
	0,068	\$ 102,072.00	5 28,430.00	\$ 134,430.0
MUD / FLUIDS DISPOSAL CHARGES CASING CREWS	0,058	\$ 47,500.00	\$ 28,450.00	\$ 47,500.0
	0,070	\$ 290,000.00	\$	\$ 290,000.0
CEMENTING CASING / LINER / FLOAT EQUIPMENT	0,072	\$ 290,000.00	\$	\$ 290,000.0
			\$ 3,000.00	\$ 238,000.2
MOBILIZE & DEMOBILIZE SUPERVISION / CONTRACT	0.086	\$ 235,000.24 \$ 198,000.00	\$ 3,000.00	\$ 238,000.2
			\$ 10,000.00	\$ 10,000.0
CONTRACT ROUSTABOUT	0.103	\$	\$ 10,000.00	\$ 10,000.0
CONTRACT LANDWORK / SURVEY	0.114	\$ 10,050.00	\$ 10,000.00	\$ 15,050.0
REGULTRY / ENVIRON CONSULTANT	0,122		\$ 9,340.00	\$ 13,216.0
SECLOGY	0.124	\$ 3,876.00 \$ 10,000.00	\$ 9,340.00	\$ 10,000.0
	0.186	\$ 10,000,00	\$ 109,125.00	\$ 109,125.0
LOW TESTING / EQUIP	0.194		\$ 109,125.00	\$ 100,000.0
MUD LOGGING	0.198			\$ 655,050.0
WIRELINE / PERF / PUMPDOWN COSTS	0.200	\$ 110,000.00	\$ 545,050.00 \$ 70,500.00	\$ 70,500.0
ACILITY ELECTRIC & AUTOMATION	0.258	\$ 200.056.73		-
Contingency	5.00% 6.25%	\$ 200,956.72 \$ 251,195.90	\$ 309,093.40 \$ 386,366.75	\$ 510,050.1 \$ 637,562.6
Гах	0.25%			
Total Intangible Cost		\$ 4,471,287_00	\$ 6,877,328.15	\$ 11,348,615.15
Total Intangible Cost Tangibles - Well Equipment		Dry Hole Cost	After Casing Point Cost	Total Cost
Fangibles - Well Equipment	0.134			Total Cost
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP	0.134 0.136	Dry Hole Cost	After Casing Point Cost	Total Cost
Fangibles - Well Equipment PELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP	_	Dry Hole Cost	After Casing Point Cost	Total Cost S - S - S -
Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE	0.136	Dry Hole Cost	After Casing Point Cost S S	Total Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP	0.136 0.204	Dry Hole Cost \$ - \$ - \$ -	After Casing Point Cast S S S S S S S S S S S S S S S S S S	Total Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	0.136 0.204 0.206	Dry Hole Cost \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	After Casing Point Cost S S S S S S S S S S S S S S S S S S	Total Cost \$ - \$ - \$ - \$ 5 \$ - \$ 5 \$ 74,400.0
Tangibles - Well Equipment IPELINE MECH MATERIALS / EQUIP SACILITY MECH MATERIALS / EQUIP DRIVE PIPE JUNDUCTOR PIPE WATER STRING SURFACE CASING	0.136 0.204 0.206 0.208	Dry Hole Cost	After Casing Point Cast S S S S S S S S S S S S S S S S S S	Total Cost: \$ - \$ - \$ - \$ 8,400.0 \$ 74,400.0 \$ 386,500.0
Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE JUNDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING	0.136 0.204 0.206 0.208 0.210	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost \$
Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE JUNDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING REMEDIAL CASING	0.136 0.204 0.206 0.208 0.210 0.212	\$ - \$ \$ \$,400.00 \$ \$ 74,400.00 \$ \$ 386,500.00	After Casing Point Cost S	Total Cost: \$ \$ \$ \$ 8,400.0 \$ 74,400.0 \$ 336,500.0
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP	0.136 0.204 0.206 0.208 0.210 0.212 0.213	Dry Hole Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ 4,400.00 \$ \$ 74,400.00 \$ \$ 386,500.00 \$	After Casing Point Cost	Total Cost: \$ \$ \$ 8,400.0 \$ \$ 74,400.0 \$ 386,500.0 \$
Fongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE JUNDUCTOR PIPE JUNDUCTOR PIPE JUNDUCTOR STRING JUNFACE CASING MITERMEDIATE CASING REMEDIAL CASING PRODUCTION CASING	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214	Dry Hole Cost \$ -	After Casing Point Cost S	Total Cost: \$ -
angibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE UNDOUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING RICHING LINER RODUCTION CASING	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost: \$
TORRIBLES - Well Equipment DIPPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE UNDUCTOR PIPE WATER STRING UNFACE CASING WITERMEDIATE CASING WIEMEDIAL CASING BIILLING LINER WEDDUCTION CASING UBING UBING USBING U	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217	\$ - \$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ - \$ \$ 486,500.00 \$	After Casing Point Cost	Total Cost: \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Tangibles - Well Equipment PIPPLINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP PROPOSED	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218	Dry Hole Cost \$	After Casing Point Cost 5	Total Cost: \$
Ongibles - Well Equipment DIPPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE UNDOUCTOR PIPE WATER STRING URFACE CASING NTERMEDIATE CASING SEMEDIAL CASING SIPILING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES SOLATION PACKER	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost: \$
angibles - Well Equipment IPPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP IPPELINE WITH MECH MATERIALS / EQUIP IPPELINE WITH MECH MATERIALS / EQUIP IPPELINE WITH WITH MECH MATERIALS / EQUIP IPPELINE WITH WITH WITH MECH MATERIALS / EQUIP IPPELINE WITH WITH WITH WITH MECH MATERIALS / EQUIP IPPELINE WITH WITH WITH WITH WITH WITH MECH MATERIALS / EQUIPMENT WITH WITH WITH WITH WITH WITH WITH WIT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222	\$ - \$ 8,400.00 \$ 386,500.00 \$ - \$ 486,500.00 \$ 5 - \$ 65,173.00 \$ 5 - \$ \$	After Casing Point Cost \$	Total Cost: \$
Tangibles - Well Equipment Dippeline Mech Materials / Equip ACILITY MECH MATERIALS / Equip DRIVE PIPE UNDOUCTOR PIPE VATER STRING UNFACE CASING VITERMEDIATE CASING VIEMEDIAL CA	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222	\$ - \$ 8,400.00 \$ 386,500.00 \$ - \$ 486,500.00 \$ - \$ 65,173.00 \$ - \$ 5 65,173.00 \$ 5 65,	After Casing Point Cost \$	Total Cost: \$
Tangibles - Well Equipment PIPPLINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP PORIVE PIPE PUNDUCTOR PIPE PUNTER STRING PUTERMEDIATE CASING PUTERMEDIAL CASING PRODUCTION CASING PURILING LINER PRODUCTION CASING PURILING LINER PUBLING PURILING LINER HANGER PUNTER / CHOKES PURILING LINER HANGER PUMPING LINER HANGER PUMPING LINER HANGER PUMPING UNIT, ENGINE PURPACE LIFT EQUIPMENT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233	Dry Hole Cost \$	After Casing Point Cost 5	Total Cost: \$
Ongibles - Well Equipment Dippeline Mech Materials / Equip Acility Mech Materials / Equip Drive Pipe UNDOUCTOR PIPE UNDOUCTOR PIPE WATER STRING URFACE CASING NTERMEDIATE CASING SIEMEDIAL CASING SIEMEDIAL CASING USBILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES SITLLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE UMFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPPMENT ANK BATT / PROCESS EQUIP / MAINT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233	Dry Hole Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 5	Total Cost: \$
Tangibles - Well Equipment DIPPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE UNDOUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING SIEMEDIAL CASING SIEMEDIAL CASING SIEMEDIAL CASING WELLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP DOWNHOLE LIFT EQUIP SOWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233	\$ 8,400.00 \$ 8,400.00 \$ 386,500.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost \$	Total Cost: \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE JUNDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING URING UNER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIPMENT "ANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT TANGIBLES - Lease EQUIPMENT TANGIBLES - Lease EQUIPMENT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234	\$	After Casing Point Cost \$	Total Cost: \$
Tangibles - Well Equipment DIPPLINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DIVER PIPE UNDOUCTOR PIPE VATER STRING UNFACE CASING VERMEDIAL CASING VERMEDIAL CASING VERDUCTION CASING USING VELLHEAD / TREE / CHOKES VELLHEAD / TREE / CH	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost: \$
angibles - Well Equipment IPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP IRIVE PIPE UNDUCTOR PIPE UNDUCTOR PIPE UNFACE CASING INTERMEDIATE CASING EMEDIAL CASING IRILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES IRILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE UMFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment NE IPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost: \$
angibles - Well Equipment IPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP IRIVE PIPE UNDUCTOR PIPE VATER STRING URFACE CASING INTERMEDIATE CASING EMEDIAL CASING INILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES INILLING LINER HANGER JOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment NE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (HEATER TREATERS)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	\$ 8,400.00 \$ 8,400.00 \$ 386,500.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost \$	Total Cost: \$
angibles - Well Equipment inpeline Mech Materials / Equip Acility Mech Materials / Equip Drive Pipe UNDUCTOR PIPE VATER STRING URFACE CASING VERMEDIATE CASING EMEDIAL CASING EMILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment INE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (KEPARATOR) ATTERY (KEPARATOR)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost \$
Ongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE UNDUCTOR PIPE UNDUCTOR PIPE WATER STRING URFACE CASING STRING URFACE CASING STRING UNTERMEDIATE CASING STRING STRING UNTERMEDIATE CASING STRING STRING UNTERMEDIATE CASING STRING STRILLING LINER STRING STRILLING LINER STRING STRILLING LINER STRING USING USING USING USING USING USING USING USING USING UNFACE LIFE ADUPMENT ANK BATT / PROCESS EQUIP OWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT STRIBLES - LOSE EQUIPMENT ANK BATT / PROCESS EQUIPMENT ANK BATT / PROCESS EQUIPMENT ANK STEPS, STAIRS ATTERY (HEATER TREATERS) ATTERY (HEATER TREATERS) ATTERY (SEPARATOR) ATTERY (GAS TREATING EQUIP)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236 0.236	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost: \$
angibles - Well Equipment IPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP RIVE PIPE UNDUCTOR PIPE UNDUCTOR PIPE UNFACE CASING INTERMEDIATE CASING EMEDIAL CASING RILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment NE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (JEPARATOR) ATTERY (JEPARATOR) ATTERY (GAS TREATING EQUIP) ATTERY (MISC EQUIP) ATTERY (MISC EQUIP)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	Dry Hole Cost \$ -	After Casing Point Cost \$	Total Cost: \$
Tangibles - Well Equipment Dippeline Mech Materials / Equip ACILITY MECH MATERIALS / Equip DRIVE PIPE UNDUCTOR PIPE UNDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING SIEMEDIAL CASING UBING VELLHEAD / TREE / CHOKES SOLATION PACKER SOLATION SANIST SIEMEDIAL CASING SOLATION SANIST SO	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.228 0.232 0.232 0.233 0.234 0.236	\$ 8,400.00 \$ 8,400.00 \$ 9,74,400.00 \$ 386,500.00 \$ 9,74,400.00 \$ 1,74,40	After Casing Point Cost \$	Total Cost \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE UNDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CHOKES REMEDIA	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.238 0.244 0.246 0.248 0.250 0.252 0.252	Dry Hole Cost \$ -	After Casing Point Cost \$	Total Cost: \$
Fongibles - Well Equipment POPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP PRIVE PIPE JUNDUCTOR PIPE JUND	0.136 0.204 0.206 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236 0.236 0.244 0.246 0.244 0.246 0.248 0.250 0.252 0.252 0.252	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost \$
Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP PRIVE PIPE UNDOUCTOR PIPE UNDOUCTOR PIPE WATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING PRILLING LINER PRODUCTION CASING UBING WELLHEAD / TREE / CHOKES PRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE URFACE LIFT EQUIP DOWNHOLD LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT TANKIS, TANKS STEPS, STAIRS MATTERY (JEPARATOR) MATTERY (JEPARATOR) MATTERY (JEATER TREATERS) MATTERY (JEATER TREATERS) MATTERY (JEATER TREATING EQUIP) MATTERY (MISC EQUIP) LOW LINE (PIPE WH TO FACILITY) PIPELINE TO SALES METERS AND METERING EQUIPMENT MATERYS AND METERING EQUIPMENT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.234 0.236 0.242 0.244 0.246 0.248 0.250 0.252 0.266 0.270 0.274 0.282	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost: \$
Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE JUNDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING SURFACE CASING ORILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES POLITION LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT Fangibles - Lease Equipment INE PIPE DOWNERLINES & SUBSTATION PANKS, TANKS STEPS, STAIRS BATTERY (HEATER TREATERS) BATTERY (GAS TREATING EQUIP) SATTERY (GAS TREATING EQUIP) PLOW LINE (PIPE WH TO FACILITY) PIPELINE SA DOMESTING EQUIPMENT LALY CONTROL OF THE COLUMN TO	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.236 0.236 0.252 0.244 0.246 0.248 0.250 0.252 0.252 0.266 0.270 0.274 0.282 0.310	Dry Hole Cost S	After Casing Point Cost \$	Total Cost: \$
Tangibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE UNDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING SIEMEDIAL CASING ROBUCTION CASING VELLIFIER PRODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER RODUCTION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT GRIBLES - Lease EQUIPMENT ANK SATT ANKS STEPS, STAIRS ATTERY (HEATER TREATERS) ATTERY (GAS TREATING EQUIP) LOW LINE (PIPE WH TO FACILITY) IPELINE TO SALES METERS AND METERING EQUIPMENT 'ALVES, FITTINGS, PROD INSTRUM UILDINGS Ontingency	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.244 0.246 0.244 0.246 0.248 0.250 0.252 0.252 0.252 0.270 0.274 0.282 0.310 5.00%	Dry Hole Cost \$	After Casing Point Cost \$	Total Cost: \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP AGILITY MECH MATERIALS / EQUIP DRIVE PIPE JUNDUCTOR PIPE MATER STRING	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.236 0.236 0.252 0.244 0.246 0.248 0.250 0.252 0.252 0.266 0.270 0.274 0.282 0.310	Dry Hole Cost S	After Casing Point Cost \$	Total Cost: \$



Lea County, New Mexico

SHL: Sec. 31 25S-36E 230' FSL & 1635' FWL BHL: Sec. 30 25S-36E 50' FNL & 1672' FWL

Nandina Fed Com 25-36-31 103H AFE # 2019-005 Capital Expenditure

February 21, 2019



Date Prepared	
February 21, 2019	

AFE Type	Project	Well No.	Field Name	Cost Center	AFE No.
Capital	Nandina Fed Com 25-36-31	103H	Delaware	40779	2019-005

Location	County State Well Type		II Туре	
SHL: Sec. 31 25S-36E 230' FSL & 1635' FWL	Loo	NM	Oil	Expl
BHL: Sec. 30 25S-36E 50' FNL & 1672' FWL	Lea	INIVI	Gas	Prod

Estimate Type	Start Date	Completion Date	Formation	MD
Original				22,782'
Revised	August 18, 2019	October 17, 2019	Wolfcamp	TVD
Supplemental				11,876'

Project Description

Drill and Complete 2 Mile Wolfcamp Lateral and Tie In to Central Tank Battery.

Total Cost \$12,841,337.61

Comments on Associated Costs

Water disposal not included.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory, and well costs under term of the joint operating agreement, regulatory order, or other applicable agreement covering this well.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$20,000,000 (100% W.I.) of Combined Single Limit coverage for well control and related redrilling and clean-up/pollution expense covering drilling (through completion) with a \$250,000 (100% W.I.) retention.

Marketing Election

Ameredev sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Ameredev, you will be subject to all of the terms of such contracts. Upon written request to Ameredev, we will share with you the terms and conditions pursuant to which gas will be sold.

I elect to take my gas in ki	nd.
------------------------------	-----

I elect to market my gas with Ameredev pursuant to the terms and conditions of its contracts.

Company	Approved By	Date



Intangibles	Code		Dry Hole Cost	After Casing Point Cost	Total Cost
MISC PREPARATION COSTS	0.004	5	20,000.00	\$	\$ 20,000.00
EASEMENT, ROW, AND ACQUISITION	0.006	\$	100,000.00	\$	\$ 100,000.00
ROAD / LOCATION PREP / RESTORATION	0.008	5	100,000.00	\$	\$ 100,000.00
DRILLING RIG	0.010	\$	950,003,04	\$ 90,200.00	\$ 1,040,203.04
COIL TUBING	0,012	S	345_	\$ 130,000.00	\$ 130,000.00
FUEL	0,016	\$	217,500,00	\$ 2,500.00	\$ 220,000.00
TRAILER, CAMP, AND CATERING	0,018	S	36,670,00	\$ 19,305.00	\$ 55,975.00
WATER & SEPTIC	0,020	S	68,850.00	S -	\$ 68,850.00
SURFACE RENTALS	0.024	S	86,630,00	\$ 73,020.00	\$ 159,650.00
DRILL BITS	0,028	S	87,000.00	\$ 3,500.00	\$ 90,500.00
DOWNHOLE RENTALS	0.030	5	17,775,00	\$ 81,700.00	\$ 99,475.00
DIRECTIONAL DRILLING	0.032	\$	630,865.00	\$ 50,000,00	\$ 630,865.00
COMPOSITE PLUGS	0.034	\$	40.002.50	\$ 63,000.00	\$ 63,000.00
TUBING & BHA INSPECT & REPAIR	0.042	\$	10,803.50	\$ 33,500,00	\$ 10,803.50
RENTAL TUBING	0.046	\$	91,519.60	\$ 32,500.00 \$ 216,048.00	\$ 32,500.00 \$ 307,567.60
WELL CONTROL EQUIP / SERVICES	0.048	S	91,519.60	5 1,000.00	\$ 1,000.00
PUMP TRUCK / PRESSURE TESTING	0.060	\$	303,920.00	\$ 312,400.00	\$ 616,320.00
MUD, ADDITIVES, AND CHEMICALS FRAC PUMPING CHARGES	0.061	\$	303,920.00	\$ 3,500,000.00	\$ 3,500,000.00
	0.061	\$	43,600.00	\$ 5,300,000.00	\$ 768,100.00
WATER RIGHTS / TRANSFER / STORAGE SOLIDS CONTROL EQUIP / SERVICES	0.062	\$	102,072.00	\$ 724,500.00	\$ 102,072.00
MUD / FLUIDS DISPOSAL CHARGES	0.068	\$	106,000.00	5 28,430.00	\$ 134,430.00
CASING CREWS	0.068	\$	47,500.00	\$ 28,450,00	\$ 47,500.00
CEMENTING CREWS	0.070	\$	290,000.00	\$	\$ 290,000.00
CASING / LINER / FLOAT EQUIPMENT	0.072	\$	41,500,00	\$	\$ 41,500.00
MOBILIZE & DEMOBILIZE	0.074	\$	235,000.24	\$ 3,000.00	\$ 238,000.24
SUPERVISION / CONTRACT	0.094	\$	198,000.00	\$ 141,750.00	\$ 339,750.00
CONTRACT ROUSTABOUT	0.103	\$	130,000,00	\$ 10,000.00	\$ 10,000.00
CONTRACT ROOSTABOOT	0.114	\$	- 1	\$ 10,000.00	\$ 10,000.00
REGULTRY / ENVIRON CONSULTANT	0.122	\$	10,050.00	\$ 5,000.00	\$ 15,050.00
SAFETY AND EMERGENCY RESPONSE	0.124	\$	3,876.00	\$ 9,340.00	\$ 13,216.00
GEOLOGY	0.186	\$	10.000.00	\$ +	\$ 10,000.00
FLOW TESTING / EQUIP	0.194	\$	10,000.00	\$ 109,125.00	\$ 109,125.00
MUD LOGGING	0.198	\$	100,000.00	\$ +	\$ 100,000.00
WIRELINE / PERF / PUMPDOWN COSTS	0.200	\$	110,000.00	\$ 545,050.00	\$ 655,050.00
FACILITY ELECTRIC & AUTOMATION	0.258	\$	110,000,00	\$ 70,500.00	\$ 70,500.00
Contingency	5.00%	\$	200,956.72	\$ 309,093.40	\$ 510,050.12
Tax	6.25%		251,195.90	\$ 386,366.75	\$ 637,562.65
Total Intangible Cost	1	\$	4,471,287.00	\$ 6,877,328,15	NA TOTAL STREET
Tangibles - Well Equipment			Dry Hole Cost	After Casing Point Cost	Total Cost
PIPELINE MECH MATERIALS / EQUIP	0.134	\$	AND AND AND RESIDENCE OF THE PARTY OF THE PA	\$	\$
FACILITY MECH MATERIALS / EQUIP			- 12	>	
POLET I MICELLIMINICATE (MICELLIMINICATE) LEGOTE	0,136	\$	12	\$	\$
	0,136 0.204				\$
DRIVE PIPE		\$		\$ 2	\$
DRIVE PIPE CONDUCTOR PIPE	0.204	\$	8,400.00	\$	\$ 8,400,00 \$
PACITITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING	0.204 0.206	\$ \$ \$	is the state of th	\$ - \$ - \$ -	\$ 8,400,00 \$
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING	0.204 0.206 0.208	\$ \$ \$	8,400.00	\$ - \$ - \$ - \$ -	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING	0.204 0.206 0.208 0.210	\$ \$ \$ \$ \$ \$	8,400.00 - 74,400.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400,00 \$ - \$ 74,400,00 \$ 386,500,00 \$ -
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING	0.204 0.206 0.208 0.210 0.212	\$ \$ \$ \$ \$	8,400.00 - 74,400.00	\$	\$ 8,400,00 \$ - \$ 74,400,00 \$ 386,500,00 \$ - \$ -
DRIVE PIPE CONDUCTOR PIPE WATER STRING	0.204 0.206 0.208 0.210 0.212 0.213	***	8,400.00 	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400,00 \$ - \$ 74,400.00 \$ 386,500.00 \$ - \$ 486,500.00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING	0.204 0.206 0.208 0.210 0.212 0.213 0.214	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 - 486,500.00	\$ - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ - \$ 486,500.00 \$ 69,000.00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 	\$	\$ 8,400,000 \$ 74,400,000 \$ 386,500,000 \$ \$ 486,500,000 \$ 69,000,000 \$ 160,173,000 \$ 160,173,000 \$
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 - 486,500.00	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400,000 \$ 74,400,000 \$ 386,500,000 \$ \$ 486,500,000 \$ 69,000,000 \$ 160,173,000 \$ 12,000,000 \$
DRIVE PIPE CONDUCTOR PIPE WATER STRING WATER STRING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222		8,400.00 - 74,400.00 386,500.00 - - 486,500.00 - 65,173.00	\$ \$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 486,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 12,000,00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.232 0.233	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 - 74,400.00 386,500.00 - 486,500.00 - 65,173.00	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING SEMEDIAL CASING ORILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES ORILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.232 0.233		8,400.00 - 74,400.00 386,500.00 - 486,500.00 - 65,173.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 5 12,000.00 \$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOOWEN HANGER DOOWEN HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOOWEN HANGER TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.236	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 - 74,400.00 386,500.00 - 486,500.00 - 65,173.00 - -	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 486,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 1,000,00 \$ 1,000,00
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING OTILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES DOTILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP CONCENTRATE / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.232 0.233	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 - 74,400.00 386,500.00 - 486,500.00 - 65,173.00	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 486,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 10,000,00 \$ 10,000,00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING REMEDIAL CASING PRILLING LINER PRODUCTION CASING PUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SORILLING LINER HANGER SORILLING LINER HANGER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP TANK BATT / PROCESS EQUIP / MAINT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 - 74,400.00 386,500.00 - 486,500.00 - 65,173.00 - -	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 386,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 1,2,000,00 \$ 1,2,000,00 \$ 1,2,000,00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING REMEDIAL CASING PRODUCTION CASING PRODUCTION CASING PUBLING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOURLING LINER HANGER SOURLING LINER HANGER SOURLING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT TAINE BOTT - LEASE EQUIPMENT LINE PIPE DOWERLINES & SUBSTATION	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.234 0.236	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 - 74,400.00 386,500.00 - 486,500.00 - 65,173.00 - - - - -	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.0 \$ 74,400.0 \$ 386,500.0 \$ 386,500.0 \$ 486,500.0 \$ 69,000.0 \$ 160,173.0 \$ 12,000.0 \$ 5 1,000.0 \$ 5 - \$ 1,000.0 \$ 5 - \$ 1,000.0
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING NTERMEDIATE CASING ORILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT TANKING NEWS SUBSTATION TANKS, TANKS STEPS, STAIRS	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 69,000.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 10,000.00 \$ 10,000.00 \$ 10,000.00
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING ORILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES ORILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP CONNELLED FOR SURFACE PUMPING UNIT, ENGINE SURFACE LIFT EQUIP CONNELLED FOR SUPPLIED FOR SURFACE FANK BATT / PROCESS EQUIP / MAINT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 - 74,400.00 386,500.00 - - 486,500.00 - 65,173.00 - - - - - -	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 386,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING SEMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING MELHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT TORIGIBLE LEASE EQUIPMENT LINE PIPE OWERLINES & SUBSTATION TANKS, TANKS STEPS, STAIRS DATTERY (HEATER TREATERS) DATTERY (HEATER TREATERS)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.238 0.238	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 -74,400.00 386,500.00 -486,500.00 - 65,173.00 - - - - - -	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 386,500,00 \$ 486,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING REMEDIAL CASING PRODUCTION CASING PRODUCTION CASING PUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT FORBIDES - LESSE EQUIPMENT LINE PIPE POWERLINES & SUBSTATION PANKS, TANKS STEPS, STAIRS BATTERY (HEATER TREATERS) BATTERY (SEPARATOR) BATTERY (SEPARATOR) BATTERY (SEPARATOR)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	B,400.00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 10,000.00 \$ 12,000.00 \$ 10,000.00 \$ 10,000.00 \$ 10,000.00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING SEMEDIAL CASING ORILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES ORILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP TANK BATT / PROCESS EQUIP / MAINT FORBIBLES & SUBSTATION TANKS, TANKS STEPS, STAIRS BATTERY (SEPARATOR) BATTERY (SEPARATOR) BATTERY (GAS TREATING EQUIP) BATTERY (MISC EQUIP) BATTERY (MISC EQUIP)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.238 0.244 0.244 0.244	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 386,500,00 \$ 486,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00 \$ 10,000,00
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING ORILLING LINER PRODUCTION CASING ORILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES ORILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP COWNHOLE LIFT EQUIP MONTH OF THE PROCESS EQUIP / MAINT FANK BATT / PROCESS EQUIP / MAINT FANKS, TANKS STEPS, STAIRS BATTERY (HEATER TREATERS) BATTERY (HEATER TREATERS) BATTERY (GAS TREATING EQUIP) BATTERY (GMISC EQUIP) ELOW LINE (PIPE WH TO FACILITY)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.242 0.244 0.246 0.248 0.250 0.252	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 -74,400.00 386,500.00 -486,500.00 -65,173.00 	\$	\$ 8,400.0 \$ 74,400.0 \$ 386,500.0 \$ 386,500.0 \$ 486,500.0 \$ 69,000.0 \$ 160,173.0 \$ 12,000.0 \$ 1701 Cost \$ 248,000.0 \$ 24,800.0
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING PREMEDIAL CASING DRILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT GIRIBLES LESSE EQUIPMENT LINE PIPE POWERLINES & SUBSTATION TANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) BATTERY (HEATER TREATERS) BATTERY (MEATER TREATERS) BATTERY (MISC EQUIP) BLOW LINE (PIPE WH TO FACILITY) PIPELINE TO SALES	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.238 0.244 0.246 0.244 0.246 0.248 0.250 0.255 0.255 0.266	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 386,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 110,000,00 \$ 12,000,00 \$ 12,000,00 \$ 12,000,00 \$ 12,000,00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING NTERMEDIATE CASING SILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP MAINT TANK BATT / PROCESS EQUIP / MAINT TONBIBLES & SUBSTATION TANKS, TANKS STEPS, STAIRS SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (SATREATING EQUIP) SATTERY (MISC EQUIP) FLOWLINE (PIPE WH TO FACILITY) PEPLINE TO SALES METERS AND METERING EQUIPMENT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.242 0.242 0.242 0.246 0.250 0.	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 386,500,00 \$ 486,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIATE CASING NTERMEDIATE CASING SOFILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES POPILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP FANK BATT / PROCESS EQUIP / MAINT FANK BATT / PROCESS EQUIP / MAINT FANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (GAS TREATING EQUIP) SATTERY (MISC EQUIP) FLOW LINE (PIPE WH TO FACILITY) POPPLINE TO SALES METERS AND METERING EQUIPMENT VALVES, FITTINGS, PROD INSTRUM	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.234 0.236 0.236 0.244 0.246 0.244 0.246 0.244 0.245 0.250 0.250 0.250 0.270	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00	\$	\$ 8,400,00 \$ 74,400,00 \$ 386,500,00 \$ 386,500,00 \$ 486,500,00 \$ 69,000,00 \$ 160,173,00 \$ 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00 \$ 15 12,000,00
DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.238 0.242 0.244 0.246 0.244 0.246 0.248 0.250 0.252 0.266 0.270 0.271	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING ORILLING LINER PRODUCTION CASING ORILLING LINER PRODUCTION CASING FUBING ORILLING LINER PRODUCTION CASING FUBING ORILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP MAINT FANK BATT / PROCESS EQUIP / MAINT FANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) SATTERY (HEATER TREATERS) SATTERY (HISC EQUIP) FLOW LINE (PIPE FLOW LINE (PIPE WH TO FACILITY) PIPELINE TO SALES MEETERS AND METERING EQUIPMENT FANKS, TANKS STREATING EQUIPMENT FANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) SATTERY (HOISC EQUIPMENT FLOW LINE (PIPE WH TO FACILITY) PIPELINE TO SALES MEETERS AND METERING EQUIPMENT FALLY SUILDINGS, PROD INSTRUM BUILDINGS	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.236 0.244 0.246 0.248 0.250 0.252 0.252 0.266 0.270 0.274 0.282 0.3310	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 69,000.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 10
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING PRILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES DRILLING LINER PRODUCTION CASING FUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT FANK BATT / PROCESS EQUIP / MAINT FORBIBLES LEASE EQUIPMENT LINE PIPE POWERLINES & SUBSTATION FANKS, TANKS STEPS, STAIRS PATTERY (HEATER TREATERS) BATTERY (HEATER TREATERS) BATTERY (MISC EQUIP) BATTERY (MISC E	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.242 0.244 0.246 0.248 0.250 0.252 0.252 0.256 0.270 0.274 0.282 0.3310 5.00%	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00	\$	\$ 8,400,000 \$ 74,400,000 \$ 386,500,000 \$ 486,500,000 \$ 69,000,000 \$ 160,173,000 \$ 12,000,000 \$ 10,000,000 \$ 1



Lea County, New Mexico

SHL: Sec. 31 25S-36E 230' FSL & 1020' FWL BHL: Sec. 30 25S-36E 50' FNL & 1120' FWL

Nandina Fed Com 25-36-31 112H AFE # 2019-001 Capital Expenditure

February 20, 2019



Date Prepared	
February 20, 2019	

AFE Type	Project	Well No.	Field Name	Cost Center	AFE No.
Capital	Nandina Fed Com 25-36-31	112H	Delaware	40773	2019-001

Location	County	State	We	II Туре
SHL: Sec. 31 25S-36E 230' FSL & 1020' FWL	Loo	NM	Oil	Expl
BHL: Sec. 30 25S-36E 50' FNL & 1120' FWL	Lea	IVIVI	Gas	Prod

Estimate Type	Start Date	Completion Date	Formation	MD
Original				22,315'
Revised	May 26, 2019	July 25, 2019	Wolfcamp	TVD
Supplemental				12,103'

Project Description

Drill and Complete 2 Mile Wolfcamp Lateral and Tie In to Central Tank Battery.

Total Cost \$12,841,337.61

Comments on Associated Costs

Water disposal not included.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory, and well costs under term of the joint operating agreement, regulatory order, or other applicable agreement covering this well.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$20,000,000 (100% W.I.) of Combined Single Limit coverage for well control and related redrilling and clean-up/pollution expense covering drilling (through completion) with a \$250,000 (100% W.I.) retention.

Marketing Election

Ameredev sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Ameredev, you will be subject to all of the terms of such contracts. Upon written request to Ameredev, we will share with you the terms and conditions pursuant to which gas will be sold.

į	Ш	1	elect	το	таке	my	gas	ın	KING	•

I elect to market my gas with Ameredev pursuant to the terms and conditions of its contracts.

Company	Approved By	Date



Intangibles	Code	Dry Hole Cost	After Casing Point Cost	Total Cost
MISC PREPARATION COSTS	0.004	\$ 20,000.00	\$	\$ 20,000.0
EASEMENT, ROW, AND ACQUISITION	0.006	\$ 100,000.00	\$ 34	\$ 100,000 0
ROAD / LOCATION PREP / RESTORATION	0.008	\$ 100,000.00	\$	\$ 100,000.0
DRILLING RIG	0.010	\$ 950,003.04	\$ 90,200.00	\$ 1,040,203.0
COIL TUBING	0.012	\$	\$ 130,000.00	\$ 130,000.0
FUEL	0.016	\$ 217,500,00	\$ 2,500.00	\$ 220,000.0
TRAILER, CAMP, AND CATERING	0.018	\$ 36,670.00	\$ 19,305,00	\$ 55,975.0
WATER & SEPTIC	0.020	\$ 68,850.00	\$	\$ 68,850.0
SURFACE RENTALS	0.024	\$ 86,630.00	\$ 73,020.00	\$ 159,650,0
DRILL BITS	0.028	\$ 87,000.00	\$ 3,500.00	\$ 90,500.0
DOWNHOLE RENTALS	0.030	\$ 17,775,00	\$ 81,700.00	\$ 99,475.0
DIRECTIONAL DRILLING	0.032	\$ 630,865,00	\$	\$ 630,865.0
COMPOSITE PLUGS	0.034	\$	\$ 63,000,00	\$ 63,000.0
TUBING & BHA INSPECT & REPAIR	0.042	\$ 10,803,50	\$	\$ 10,803.
RENTAL TUBING	0.046	\$	\$ 32,500,00	\$ 32,500.0
WELL CONTROL EQUIP / SERVICES	0.048	\$ 91,519.60	\$ 216,048.00	\$ 307,567.
PUMP TRUCK / PRESSURE TESTING	0,054	\$	\$ 1,000.00	\$ 1,000.
MUD, ADDITIVES, AND CHEMICALS	0.060	\$ 303,920.00	\$ 312,400.00	\$ 616,320.
FRAC PUMPING CHARGES	0,061	\$	\$ 3,500,000.00	\$ 3,500,000.
WATER RIGHTS / TRANSFER / STORAGE	0.062	\$ 43,600.00	\$ 724,500.00	\$ 768,100.
SOLIDS CONTROL EQUIP / SERVICES	0,066	\$ 102,072.00	\$	\$ 102,072
MUD / FLUIDS DISPOSAL CHARGES	0,068	\$ 106,000.00	\$ 28,430.00	\$ 134,430.
CASING CREWS	0,070	\$ 47,500.00	\$	\$ 47,500.
CEMENTING	0,072	\$ 290,000.00	\$	\$ 290,000.0
CASING / LINER / FLOAT EQUIPMENT	0,074	\$ 41,500.00	\$	\$ 41,500.0
MOBILIZE & DEMOBILIZE	0,086	\$ 235,000.24	\$ 3,000.00	\$ 238,000.
SUPERVISION / CONTRACT	0.094	\$ 198,000.00	\$ 141,750.00	\$ 339,750.0
CONTRACT ROUSTABOUT	0,103	\$	\$ 10,000.00	\$ 10,000.0
CONTRACT LANDWORK / SURVEY	0,114	\$	5 10,000.00	\$ 10,000.0
REGULTRY / ENVIRON CONSULTANT	0,122	\$ 10,050.00	\$ 5,000.00	\$ 15,050.0
SAFETY AND EMERGENCY RESPONSE	0,124	\$ 3,876.00	\$ 9,340.00	\$ 13,216.0
GEOLOGY	0,186	\$ 10,000.00	\$	\$ 10,000.0
FLOW TESTING / EQUIP	0:194	\$	\$ 109,125.00	\$ 109,125.0
MUD LOGGING	0,198	\$ 100,000.00	\$	\$ 100,000.0
WIRELINE / PERF / PUMPDOWN COSTS	0,200	\$ 110,000.00	\$ 545,050.00	\$ 655,050.0
FACILITY ELECTRIC & AUTOMATION	0,258	\$	\$ 70,500.00	
Contingency	5.00%	\$ 200,956.72	\$ 309,093.40	\$ 510,050.1
			\$ 309,093,40 \$ 386,366,75	
Contingency Tax	5.00%	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15	\$ 510,050.1 \$ 637,562.6 \$ 11,348,615.1
Contingency Tax Total Intangible Cost	5.00%	\$ 200,956.72 \$ 251,195.90	\$ 309,093.40 \$ 386,366.75	\$ 510,050.1 \$ 637,562.6
Contingency Tax Total Intangible Cost Tangibles - Well Equipment	5.00% 6.25%	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15	\$ 510,050. \$ 637,562.6 \$ 11,348,615.
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP	5.00% 6.25% 0.134	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ -	\$ 510,050. \$ 637,562. \$ 11,348,615.
Contingency Tax Total Intangible Cost Tangibles Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE	5.00% 6.25% 0.134 0.136	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ - \$ -	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$ - \$ - \$ -
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE	5.00% 6.25% 0.134 0.136 0.204	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ \$ \$ \$ \$	\$ 309,093,40 \$ 386,366,75 \$ 6,877,328.15 After Casing Point Cost \$ - \$ 5	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$ - \$ 5 \$ - \$ 8,400.
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP	5.00% 6.25% 0.134 0.136 0.204 0.206	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ - \$ 5 \$ 5 \$ 8,400.00	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ - \$ - \$ - \$ -	\$ 510,050. \$ 637,562. \$ 11,348,615. **Total Cost** \$ -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING	5.00% 6.25% 0.134 0.136 0.204 0.206 0.208	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ 5 \$ 5 \$ 8,400.00 \$ -	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 510,050.: \$ 637,562.4 \$ 11,348,615.: Total Cost \$ - 5 \$ - 5 \$ 5 \$ 8,400.0 \$ - 5
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING	5.00% 6.25% 0.134 0.136 0.204 0.206 0.208	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost \$ - \$ \$ - \$ \$ 5 - \$ \$ 5 - \$ \$ 5 - \$ \$ 5 - \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$ -5 \$ -5 \$ 8,400. \$ 74,400.
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING	5.00% 6.25% 0.134 0.136 0.204 0.206 0.208 0.210	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 510,050. \$ 637,562.6 \$ 11,348,615. Total Cost \$ - \$ - \$ 5 \$ 8,400.1 \$ 74,400.1 \$ 386,500.6
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING	5.00% 6.25% 0.134 0.136 0.204 0.206 0.208 0.210 0.212 0.213	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ - \$ - \$ - \$ 8,400.00 \$ - \$ 74,400.00 \$ 386,500.00 \$ -	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost** \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ 5 \$ - \$ \$ 7 \$ 7 \$ 7 \$ 7 \$ 7 \$ 7 \$ 7 \$ 7 \$ 7 \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$ -5 \$ -5 \$ -5 \$ -74,400.0 \$ 386,500.0 \$ -7
Contingency Tax Total Intangible Cost Tangibles- Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER	5.00% 6.25% 0.134 0.136 0.204 0.206 0.208 0.210 0.212 0.213	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ 5 \$ 5 \$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 5	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ -5 \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$ -5 \$ -5 \$ -8,400.0 \$ 74,400.0 \$ 386,500.0 \$ -5 \$ -7 \$ -7 \$ -7 \$ -7 \$ -7 \$ -7 \$ -7 \$ -7
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERNEDIATE CASING REMEDIAL CASING PREMEDIAL CASING PRODUCTION CASING	0.134 0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00	\$ 309,093,40 \$ 386,366,75 \$ 6,877,328,15 After Casing Point Cost \$ - \$ \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING REMEDIAL CASING PRINDIG LINER PERDUCTION CASING TUBING WELLHEAD / TREE / CHOKES	0.134 0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING BEMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING	0.134 0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.214 0.216	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **Particular Cost** \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles- Well Equipment PIPELINE MECH MATERIALS / EQUIP ACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIAL CASING PREMEDIAL CASING DRILLING LINER PRODUCTION CASING IUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER	0.134 0.136 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.215	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost** \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles- Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP PRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING NTERMEDIAL CASING PREMEDIAL CASING PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES SOLLTION PACKER PUMPING UNIT, ENGINE	0.134 0.136 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.217 0.220 0.220	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ 5 \$ 5 \$ 8,400.00 \$ 386,500.00 \$ 5 \$ 486,500.00 \$ 5 \$ 65,173.00 \$ 5	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost** \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR CASING CREMEDIAL CAS	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.222	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ 5 \$ 5 \$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 5 \$ 486,500.00 \$ 5 \$ 65,173.00 \$ 5	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **Particle Casing Point Cost** \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Total Intangible Cost Fangibles - Well Equipment PPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP SONDUCTOR PIPE CONDUCTOR PIPE CONDUCTOR PIPE NATER STRING SURFACE CASING NEEMEDIAL CASING PIELING LINER PRODUCTION CASING VIELING LINER WELLHEAD / TREE / CHOKES CRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 **Particle Casing Point Cost** \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CONDUCTOR PIPE WATER STRING SURFACE CASING NITERMEDIATE CASING REMEDIAL CASING PRODUCTION CASING PRODUCTION CASING PRODUCTION CASING PRODUCTION CASING PRODUCTION CASING PRODUCTION CASING PUBLING WELHEAD / TREE / CHOKES PILLING LINER HANGER SOLATION PACKER	0.134 0.136 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.212 0.213 0.220 0.222 0.233	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ 5 \$ 8,400.00 \$ 386,500.00 \$ 386,500.00 \$ 5 \$ 65,173.00 \$ 65,173.00 \$ 5 \$ 65,173.00	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost** \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP CONDUCTOR PIPE MATER STRING SURFACE CASING NATER MEDIATE CASING PREMEDIAL CASING PRILLING LINER PRODUCTION CASING "UBING WELLHEAD / TREE / CHOKES PILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP SOWNHOLE LIFT EQUIP MAINT	0.134 0.136 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.212 0.213 0.220 0.222 0.233	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost** \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency fax Fotal Intangible Cost Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR CASING CONTRACTOR CONTRACTOR CONTRACTO	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.232 0.233 0.234	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Total Intangible Cost Fangibles - Well Equipment PPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP FORIVE PIPE CONDUCTOR PIPE NATER STRING SURFACE CASING NITERMEDIAL CASING PILLING LINER PRODUCTION CASING VIELING LINER VIELING LINER VIELING LINER PUBLING VIELING LINER HANGER SOLATION PACKER PUMPING LINIE RHANGER SOLATION PACKER PUMPING LINIE PIPE SOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP MENT TANK BATT / PROCESS EQUIP / MAINT Tangibles - Lease Equipment LINE PIPE DOWERLINES & SUBSTATION	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.232 0.233 0.234 0.236	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 **After Casing Point Cost* \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP CONDUCTOR PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NATER MEDIALE CASING REMEDIAL CASING PREMEDIAL CASING CRILLING LINER PRODUCTION CASING UBING WELLHEAD / TREE / CHOKES CRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT Angibles - Lease Equipment INE PIPE FOWERLINES & SUBSTATION CANKS, TANKS STEPS, STAIRS	0.134 0.136 0.206 0.208 0.210 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.234 0.236	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ \$ 8,400.00 \$ \$ 74,400.00 \$ \$ 386,500.00 \$ \$ \$ 65,173.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR CASING REMEDIAL CASING FRILLING LINER PORDUCTION CASING PUBING WELLHEAD / TREE / CHOKES PILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP CONWHOLE LIFT EQUIPMENT CANK BATT / PROCESS EQUIP / MAINT Tangibles - Lease Equipment LINE PIPE COWERLINES & SUBSTATION CANKS, TANKS STEPS, STARS BATTERY (HEATER TREATERS)	0.134 0.134 0.136 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.227 0.222 0.233 0.234 0.234	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. **Total Cost** \$
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP CONDUCTOR PIPE CONDUCTOR CASING REMEDIAL CASING CREMEDIAL CASING CREMED	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.232 0.233 0.234 0.236	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ - 5 \$ - 5 \$ - 5 \$ - 6 \$ - 7	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Fotal intangible Cost Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP FOUNDUCTOR PIPE WATER STRING UNFACE CASING NITERMEDIATE CASING PIEMEDIAL CASING PIEMEDIAL CASING PIEMEDIAL CASING PIEMEDIAL CASING VELLHEAD / TREE / CHOKES PIELLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE URFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT ANGIBLES - LEASE EQUIPMENT INE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS LATTERY (HEATER TREATERS) LATTERY (GAS TREATING EQUIP) ATTERY (GAS TREATING EQUIP)	0.134 0.134 0.136 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.227 0.222 0.233 0.234 0.236 0.238 0.234 0.236	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP CONDUCTOR PIPE CONDUCTOR PIPE CONDUCTOR PIPE CONDUCTOR PIPE CONDUCTOR PIPE CONDUCTOR CASING SIEMEDIAL CASING SIEMEDIAL CASING CORILLING LINER COPULITION CASING CUBING WELLHEAD / TREE / CHOKES CORILLING LINER COMUNITY FOR COMMENT CONTROL OF THE COMMENT CAN BATT / PROCESS EQUIP / MAINT CAN BATTERY (HEATER TREATERS) LATTERY (HEATER TREATERS) LATTERY (GES AREATING EQUIP) CATTERY (MISC EQUIP)	0.134 0.136 0.206 0.208 0.210 0.211 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.234 0.236 0.236 0.206 0.207 0.212 0.214 0.216 0.207 0.208 0.208 0.208 0.208 0.210 0.214 0.216 0.216 0.208 0.208 0.208 0.210 0.216 0.217 0.218 0.220 0.220 0.220 0.220 0.220 0.230 0.208 0.208 0.208 0.208 0.210 0.210 0.210 0.210 0.210 0.210 0.210 0.210 0.210 0.210 0.210 0.210 0.210 0.220 0.220 0.232 0.233 0.234 0.236	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$ \$ \$ \$ \$ \$ \$ \$ -	\$ 510,050. \$ 637,562. \$ 11,348,615. **Total Cost** \$
Contingency Tax Fotal Intangible Cost Fotal Intangible Coulp Fotal Intangible Coulp Fotal Intangible Coulp Fotal Intangible Coulp Fotal Intangible Cost F	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.233 0.234 0.236 0.236 0.234 0.246 0.266	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Fotal intangible Cost Fotal intangible Could Fotal intangible Fotal Cost Cost Cost Fotal Intangible Fotal Cost Cost Fotal Intangible Fotal Cost Cost Fotal Intangible Fotal Intangib	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.232 0.233 0.234 0.236 0.236 0.242 0.246 0.246 0.248 0.250 0.250 0.250	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP SONDUCTOR PIPE WATER STRING SURFACE CASING NITERMEDIAL CASING PIREMEDIAL CASING PUBLING WELHEAD / TREE / CHOKES PIREMEDIAL CASING PUMPING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE PUM	0.134 0.134 0.136 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.227 0.222 0.233 0.234 0.236 0.238 0.234 0.236	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. Total Cost \$
Contingency Tax Total Intangible Cost Tengibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PRIVE PIPE CONDUCTOR CASING CONTREMEDIAL CASING	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.242 0.244 0.246 0.246 0.246 0.246 0.246 0.266 0.274 0.266 0.274 0.282	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. **Total Cost** \$
Contingency Tax Total Intangible Cost Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR CASING REMEDIAL CASI	0.134 0.136 0.204 0.206 0.208 0.211 0.212 0.213 0.214 0.216 0.227 0.233 0.234 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.237 0.236 0.237 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.237 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.237 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.236 0.237 0.236	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. **Total Cost** \$
Contingency Fax Fotal Intangible Cost Fangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE CONTROL CASING CONTROL CONTR	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.223 0.233 0.234 0.236 0.236 0.236 0.206 0.270 0.227 0.218 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.232 0.234 0.236 0.237 0.236 0.236 0.236 0.236 0.237 0.238 0.248 0.246 0.250 0.250 0.270 0.274 0.288 0.266 0.270 0.274 0.288 0.290 0.274 0.280 0.290 0.390 0.	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093.40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. **Total Cost** \$
Contingency Tax Total Intangible Cost Total Intangible Cost Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP CACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR CASING REMEDIAL CASI	0.134 0.136 0.204 0.206 0.208 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.220 0.223 0.233 0.234 0.236 0.236 0.236 0.206 0.270 0.227 0.218 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.232 0.234 0.236 0.237 0.236 0.236 0.236 0.236 0.237 0.238 0.248 0.246 0.250 0.250 0.270 0.274 0.288 0.266 0.270 0.274 0.288 0.290 0.274 0.280 0.290 0.390 0.	\$ 200,956.72 \$ 251,195.90 \$ 4,471,287.00 Dry Hole Cost \$	\$ 309,093,40 \$ 386,366.75 \$ 6,877,328.15 After Casing Point Cost \$	\$ 510,050. \$ 637,562. \$ 11,348,615. **Total Cost** \$



Lea County, New Mexico

SHL: Sec. 31 25S-36E 230' FSL & 2348' FWL BHL: Sec. 30 25S-36E 50' FNL & 2318' FWL

Nandina Fed Com 25-36-31 114H AFE # 2019-004 Capital Expenditure

February 21, 2019



Date Prepared	
February 21, 2019	

AFE Type	Project	Well No.	Field Name	Cost Center	AFE No.
Capital	Nandina Fed Com 25-36-31	114H	Delaware	40786	2019-004

Location	County	State	We	II Туре
SHL: Sec. 31 25S-36E 230' FSL & 2348' FWL	Lon	NM	Oil	Expl
BHL: Sec. 30 25S-36E 50' FNL & 2318' FWL	Lea	INIVI	Gas	Prod

Estimate Type	ype Start Date Completion Date		Formation	MD
Original				22,773'
Revised	July 7, 2019	September 5, 2019	Wolfcamp	TVD
Supplemental				11,959'

Project Description

Drill and Complete 2 Mile Wolfcamp Lateral and Tie In to Central Tank Battery.

Total Cost \$12,841,337.61

Comments on Associated Costs

Water disposal not included.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory, and well costs under term of the joint operating agreement, regulatory order, or other applicable agreement covering this well.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$20,000,000 (100% W.I.) of Combined Single Limit coverage for well control and related redrilling and clean-up/pollution expense covering drilling (through completion) with a \$250,000 (100% W.I.) retention.

Marketing Election

Ameredev sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Ameredev, you will be subject to all of the terms of such contracts. Upon written request to Ameredev, we will share with you the terms and conditions pursuant to which gas will be sold.

	Ι	elect	to	take	my	gas	in	kind	١.
--	---	-------	----	------	----	-----	----	------	----

I elect to market my gas with Ameredev pursuant to the terms and conditions of its contracts.

Company	Approved By	Date



Intangibles	Code		Dry Hole Cost	After Casing Point Cost	Total Cost
MISC PREPARATION COSTS	0.004	\$	20,000.00	\$	\$ 20,000.0
EASEMENT, ROW, AND ACQUISITION	0.006	\$	100,000.00	\$	5 100,000.0
ROAD / LOCATION PREP / RESTORATION	0.008	\$	100,000.00	\$	5 100,000.0
DRILLING RIG	0.010	\$	950,003.04	\$ 90,200.00	5 1,040,203.0
COIL TUBING	0.012	\$	35	\$ 130,000.00	\$ 130,000.0
FUEL	0.016	\$	217,500.00	\$ 2,500.00	\$ 220,000.0
TRAILER, CAMP, AND CATERING	0.018	\$	36,670,00	\$ 19,305.00	\$ 55,975.0
WATER & SEPTIC	0.020	\$	68,850.00	\$	\$ 68,850.0
SURFACE RENTALS	0.024	\$	86,630,00	\$ 73,020.00	\$ 159,650.0
DRILL BITS	0.028	\$	87,000.00	\$ 3,500.00	\$ 90,500.0
DOWNHOLE RENTALS	0.030	\$	17,775.00	\$ 81,700.00	\$ 99,475.0
DIRECTIONAL DRILLING	0.032	\$	630,865.00	\$	\$ 630,865.0
COMPOSITE PLUGS	0.034	\$		\$ 63,000.00	\$ 63,000.0
TUBING & BHA INSPECT & REPAIR	0.042	\$	10,803.50	\$	\$ 10,803.5
RENTAL TUBING	0.046	\$	- 4	\$ 32,500.00	\$ 32,500.0
WELL CONTROL EQUIP / SERVICES	0.048	\$	91,519.60	\$ 216,048.00	\$ 307,567.6
PUMP TRUCK / PRESSURE TESTING	0.054	\$		\$ 1,000.00	\$ 1,000.0
MUD, ADDITIVES, AND CHEMICALS	0.060	\$	303,920.00	\$ 312,400.00	\$ 616,320,0
FRAC PUMPING CHARGES	0.061	\$	-	\$ 3,500,000.00	\$ 3,500,000.0
WATER RIGHTS / TRANSFER / STORAGE	0.062	\$	43,600.00	\$ 724,500.00	5 768,100.0
SOLIDS CONTROL EQUIP / SERVICES	0.066	\$	102,072.00	\$	\$ 102,072,00
MUD / FLUIDS DISPOSAL CHARGES	0.068	\$	106,000.00	\$ 28,430.00	\$ 134,430.0
CASING CREWS	0.070	\$	47,500.00	\$	\$ 47,500.0
CEMENTING	0.072	\$	290,000.00	\$	\$ 290,000.0
CASING / LINER / FLOAT EQUIPMENT	0.074	\$	41,500.00	\$	
MOBILIZE & DEMOBILIZE	0.086	\$	235,000.24	5 3,000.00	\$ 41,500.00 \$ 238,000.24
SUPERVISION / CONTRACT	0.086	\$	198,000.00	\$ 3,000.00 \$ 141,750.00	
			198,000.00		
CONTRACT ROUSTABOUT	0.103	\$		5 10,000.00	\$ 10,000.00
CONTRACT LANDWORK / SURVEY	0.114	\$	40.000.00	\$ 10,000.00	\$ 10,000.00
REGULTRY / ENVIRON CONSULTANT	0.122	\$	10,050.00	\$ 5,000.00	\$ 15,050.00
SAFETY AND EMERGENCY RESPONSE	0.124	\$	3,876.00	\$ 9,340.00	\$ 13,216.00
GEOLOGY	0.186	\$	10,000.00	\$	\$ 10,000.00
LOW TESTING / EQUIP	0.194	\$		\$ 109,125.00	\$ 109,125.00
MUD LOGGING	0.198	\$	100,000.00	\$	\$ 100,000.00
WIRELINE / PERF / PUMPDOWN COSTS	0.200	\$	110,000.00	\$ 545,050.00	\$ 655,050.00
ACILITY ELECTRIC & AUTOMATION	0.258	\$	7	\$ 70,500.00	\$ 70,500.00
Contingency	5.00%	\$	200,956.72	\$ 309,093.40	\$ 510,050.12
ax Total Intangible Cost	6.25%	\$	251,195.90 4,471,287.00	\$ 386,366.75 \$ 6,877,328.15	\$ 637,562.65 \$ 11,348,615.15
PIPELINE MECH MATERIALS / EQUIP	0.134	\$	Dry Hole Cost	After Casing Point Cost S	Total Cost
The state of the s	0.154	>			\$
	0.120		197		6
	0.136	\$	- 12	\$.	\$
DRIVE PIPE	0.204	\$	2	\$	5
ORIVE PIPE CONDUCTOR PIPE	0.204 0.206	\$	8,400.00	\$ -	\$ 8,400.00
ORIVE PIPE CONDUCTOR PIPE WATER STRING	0.204 0.206 0.208	\$ \$	8,400.00	\$ - \$ - \$ -	\$
ORIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING	0.204 0.206 0.208 0.210	\$ \$	8,400.00 74,400.00	\$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00
DRIVE PIPE CONDUCTOR PIPE MATER STRING SURFACE CASING NTERMEDIATE CASING	0.204 0.206 0.208 0.210 0.212	\$ \$ \$ \$	8,400.00	\$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00
DRIVE PIPE XUNDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING	0.204 0.206 0.208 0.210 0.212 0.213	\$ \$ \$ \$	8,400.00 74,400.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$
DRIVE PIPE CONDUCTOR PIPE WATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAT CASING BRILLING LINER	0.204 0.206 0.208 0.210 0.212 0.213 0.214	\$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500,00	5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ -
ORIVE PIPE CONDUCTOR PIPE WATER STRING URFACE CASING NEEMEDIATE CASING REMEDIATE CASING	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216	\$ \$ \$ \$ \$ \$	8,400.00 74,400.00	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ \$ \$ 486,500.00
DRIVE PIPE KUNDUCTOR PIPE WATER STRING LURFACE CASING NTERMEDIATE CASING REMEDIAL CASING REMEDIAL CASING ROPILLING LINER RODUCTION CASING UBING	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217	\$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 	\$ - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ 8,400.00 \$
DRIVE PIPE XXNDUCTOR PIPE VATER STRING UNFFACE CASING NTERMEDIATE CASING EMEDIAL CASING BRILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500.00 486,500.00 65,173.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 5 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00
DRIVE PIPE XXNDUCTOR PIPE VATER STRING UNFFACE CASING NTERMEDIATE CASING EMEDIAL CASING BRILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 	\$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 8,400.00 \$ - \$ 74,400.00 \$ 386,500.00 \$ - \$ 5 \$ 486,500.00 \$ 69,000.00
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING INTERMEDIATE CASING INTERMEDIATE CASING INTERMEDIATE CASING INTERMEDIAL CASING INTERMEDIAL CASING INTERMEDIAL CASING INTERMEDIATE CASING UBLILING LINER RODUCTION CASING UBLIHEAD / TREE / CHOKES INTERMEDIATION PACKER	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500.00 486,500.00 65,173.00	\$ - 5 \$ - 7 \$ - 95,000.00 \$ 95,000.00 \$ 12,000.00	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 5 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING INTERMEDIATE CASING INTERMEDIATE CASING INTERMEDIATE CASING INTERMEDIAL CASING INTERMEDIAL CASING INTERMEDIAL CASING INTERMEDIATE CASING UBLILING LINER RODUCTION CASING UBLIHEAD / TREE / CHOKES INTERMEDIATION PACKER	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 5 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 12,000.00
DRIVE PIPE KUNDUCTOR PIPE WATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASIN	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500,00 486,500.00 	\$ - 5 \$ - 7 \$ - 95,000.00 \$ 95,000.00 \$ 12,000.00	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00
DRIVE PIPE XXNDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING RILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.233	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ \$ 69,000.00 \$ \$ 160,173.00 \$ \$ 12,000.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
DRIVE PIPE ZONDUCTOR PIPE WATER STRING WITERMEDIATE CASING REMEDIAL CA	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.233	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 12,000.00
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING INFERMEDIATE CASING INFILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP WOWNHOLE LIFT EQUIP WOWNHOLE LIFT EQUIP ANK BATT / PROCESS EQUIP / MAINT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.233	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 486,500.00 \$ 160,173.00 \$ 12,000.00 \$ 1,000.00
ORIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING UBING VEILLING LINER RODUCTION CASING UBING UBING VEILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.233	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ - \$ - \$ - \$ - \$ 5 - \$ 5 - \$ 5 - \$ 5 - \$ 5 - \$ 5 - \$ 5 - \$ 5 5 - \$ 5 5 - \$ 5 5 5 - \$ 5 5 5 5	\$ 8,400.0 \$ 74,400.0 \$ 386,500.0 \$ 486,500.0 \$ 69,000.0 \$ 69,000.0 \$ 12,000.0 \$ 12,000.0 \$ 5
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING RILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment INE PIPE	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 10,000.00 \$ 10,000.00
ORIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING VERMEDIATE CASING SEMEDIAL CASING SEMEDIAL CASING SEMEDIAL CASING SEMEDIAL CASING SEMELLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES SEILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment INE PIPE OWERLINES & SUBSTATION	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.234 0.236	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.0 \$ 74,400.0 \$ 386,500.0 \$ 386,500.0 \$ 69,000.0 \$ 160,173.0 \$ 12,000.0 \$ 10,000.0 \$ 10,000.0
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING REMEDIAL CASING RODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER COLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIP ANK BATT / PROCESS EQUIP / MAINT ANK BATT / PROCESS EQUIP / MAINT ANK BILLING LINER E OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.219 0.222 0.232 0.232 0.234 0.236	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500.00 486,500.00 65,173.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 8,400.0 \$ 74,400.0 \$ 386,500.0 \$ 486,500.0 \$ 69,000.0 \$ 160,173.0 \$ 12,000.0 \$ 7 12,000.0 \$ 15 15 15 15 15 15 15 15 15 15 15 15 15
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING UBING VEILLING LINER RODUCTION CASING UBING VEILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment INE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (HEATER TREATERS)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.238 0.244	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00	\$	\$ 8,400.0 \$ 74,400.0 \$ 386,500.0 \$ 486,500.0 \$ 69,000.0 \$ 160,173.0 \$ 12,000.0 \$ 10,000.0 \$ 10,000.0 \$ 10,000.0
PRIVE PIPE UNDUCTOR PIPE UNDUCTOR PIPE VATER STRING URFACE CASING VERMEDIATE CASING EMEDIAL CASING RILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIP OWNHOLE LIFT EQUIP / MAINT angibles - Lease Equipment NE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (KEATER TREATERS) ATTERY (KEATER TREATERS)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00 	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 170tal Cost \$ 24,800.00 \$ 24,800.00
VATER STRING UNDUCTOR PIPE VATER STRING URFACE CASING UTERMEDIATE CASING EMEDIAL CASING EMEDIAL CASING RILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT angibles - Lease Equipment NE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (HEATER TREATERS) ATTERY (SEPARATOR) ATTERY (GAS TREATING EQUIP)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.242 0.244 0.244 0.248 0.250	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 10,000.00 \$ 10,000.00 \$ 10,000.00 \$ 10,000.00 \$ 10,000.00 \$ 10,000.00
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING INFILLING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES INFILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIP ANK BATT / PROCESS EQUIP / MAINT anglibes - Lease Equipment NE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (HEATER TREATERS) ATTERY (SEPARATOR) ATTERY (SEPARATOR) ATTERY (MISC EQUIP) ATTERY (MISC EQUIP)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.242 0.242 0.244 0.246 0.248 0.252	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 10,000.00 \$ 12,000.00 \$ 12,000.00
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING NTERMEDIATE CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING UBING VEILHEAD / TREE / CHOKES REMEDIAL CASING UBING VEILHEAD / TREE / CHOKES REMEDIAL CHOKES REMEDIAL CHOKES REMEDIAL CHOKES UMPING LINER HANGER UMPING UNIT, ENGINE URFACE LIFT EQUIP ROWNHOLE LIFT EQUIP ROWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT ANGIBLES - Lease Equipment INE PIPE OWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (HEATER TREATERS) ATTERY (HEATER TREATERS) ATTERY (GAS TREATING EQUIP) ATTERY (MISC EQUIP) LOW LINE (PIPE WH TO FACILITY)	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.238 0.244 0.246 0.248 0.252 0.266	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 10
DRIVE PIPE CONDUCTOR PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING UBING VELLHEAD / TREE / CHOKES REMEDIAL CASING UBING VELLHEAD / TREE / CHOKES REMEDIAL CHOKES REMEDIAL CHOKES REMEDIAL CHOKES REMEDIAL CHOKES UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIP NAINT ANKS STAY FANGES ATTERY (HEATER TREATERS) ATTERY (HEATER TREATERS) ATTERY (GAS TREATING EQUIP) ATTERY (MISC EQUIP) LOW LINE (PIPE WH TO FACILITY) IPELINE TO SALES	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236 0.242 0.242 0.244 0.246 0.246 0.248 0.250 0.256 0.270	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 170tal Cost \$ 24,800.00 \$ 24,800.00 \$ 12,500.00
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING REMEDIAL CASING UBING VELLHEAD / TREE / CHOKES RILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP OWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT ANGIBLES - LOSSE EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT ANGIBLES - LOSSE EQUIPMENT ANTERY (HEATER TREATERS) ATTERY (HEATER TREATERS) ATTERY (GAS TREATING EQUIP) ATTERY (MISC EQUIP) LOW LINE (PIPE WH TO FACILITY) IPELINE TO SALES IETERS AND METERING EQUIPMENT	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236 0.244 0.244 0.244 0.250 0.252 0.252 0.252 0.252 0.268	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500.00 486,500.00 65,173.00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 17,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00
DRIVE PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING NTERMEDIATE CASING NIEMEDIAL CASING NIEMEDIAL CASING NIEMEDIAL CASING NIELING LINER RODUCTION CASING UBING VELLHEAD / TREE / CHOKES PRILLING LINER HANGER SOLATION PACKER UMPING UNIT, ENGINE URFACE LIFT EQUIP DOWNHOLE LIFT EQUIP MOWNHOLE LIFT EQUIP NOWNHOLE LIFT EQUIP NOWNHOLE LIFT EQUIP NOWNHOLE LIFT EQUIP ANK BATT / PROCESS EQUIP / MAINT ANK BATT / PROCESS EQUIP / MAINT ANKING STEPS, STAIRS ATTERY (HEATER TREATERS) ATTERY (SEPARATOR) ATTERY (SEPARATOR) ATTERY (SEAS TREATING EQUIP) ATTERY (MISC EQUIP) LOW LINE (PIPE WH TO FACILITY) IPELINE TO SALES METERS AND METERING EQUIPMENT ALVES, FITTINGS, PROD INSTRUM	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.244 0.246 0.246 0.248 0.250 0.252 0.266 0.277 0.282	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00
DRIVE PIPE JUNDUCTOR PIPE WATER STRING JURFACE CASING INTERMEDIATE CASING REMEDIAL CASING ROPILLING LINER PRODUCTION CASING PUBLING LINER POPULATION CASING PUBLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE UURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT TOTAL BATT / PROCESS EQUIP / MAINT TOTAL SANKS STEPS, STAIRS PATTERY (HEATER TREATERS) PATTERY (HEATER TREATERS) PATTERY (GAS TREATING EQUIP) LOW LINE (PIPE WH TO FACILITY) IPELINE TO SALES METERS AND METERING EQUIPMENT ALVES, FITTINGS, PROD INSTRUM UILDINGS	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.233 0.234 0.236 0.238 0.244 0.246 0.248 0.252 0.266 0.270 0.274 0.282 0.3310	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 15,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00
DRIVE PIPE KUNDUCTOR PIPE WATER STRING URFACE CASING INTERMEDIATE CASING REMEDIAL CASING UBING WELLHEAD / TREE / CHOKES REMILING LINER HANGER SOLATION PACKER RUMPING UNIT, ENGINE URFACE LIFT EQUIP ROWNHOLE LIFT EQUIPMENT ANK BATT / PROCESS EQUIP / MAINT ANGIBLES - LOSSE EQUIP / MAINT ANTERY (HEATER TREATERS) ATTERY (HEATER TREATERS) ATTERY (HEATER TREATERS) ATTERY (MISC EQUIP) LOW LINE (PIPE WH TO FACILITY) IPELINE TO SALES RETERS AND METERING EQUIPMENT ALVES, FITTINGS, PROD INSTRUM UILDINGS Ontingency	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236 0.236 0.242 0.244 0.246 0.246 0.248 0.250 0.252 0.256 0.270 0.274 0.282 0.310 5.00%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00 Dry Hole Cost	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00
DRIVE PIPE CONDUCTOR PIPE CONDUCTOR PIPE VATER STRING URFACE CASING NTERMEDIATE CASING NTERMEDIATE CASING REMEDIAL CASING RODUCTION CASING UBING VELLHEAD / TREE / CHOKES FOLITION PACKER COLATION PACKER COLATION PACKER COLATION PACKER COLATION PACKER COMPINE UNIT, ENGINE URFACE LIFT EQUIP COWNHOLE LIFT EQUIP COWNHOLE LIFT EQUIP COWNHOLE LIFT EQUIP COWERLINES & SUBSTATION ANKS, TANKS STEPS, STAIRS ATTERY (HEATER TREATERS) ATTERY (SEPARATOR) ATTERY (GAS TREATING EQUIP) ATTERY (MISC EQUIP) LOW LINE (PIPE WIT O FACILITY) IPPELINE TO SALES METERS AND METERING EQUIPMENT ALVES, FITTINGS, PROD INSTRUM UILDINGS contingency ax	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236 0.236 0.242 0.244 0.246 0.246 0.248 0.250 0.252 0.256 0.270 0.274 0.282 0.310 5.00%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400.00 386,500.00 486,500.00 65,173.00	\$	\$ 8,400.00 \$ 74,400.01 \$ 386,500.01 \$ 386,500.01 \$ 486,500.01 \$ 69,000.01 \$ 15,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00 \$ 12,500.00
ACILITY MECH MATERIALS / EQUIP DRIVE PIPE ZONDUCTOR PIPE MATER STRING SURFACE CASING NITERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING MELHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP MELHEAD / PROCESS EQUIP / MAINT AND BATT / PROCESS EQUIP / MAINT AND BATT / PROCESS EQUIP / MAINT AND SATT / PROCESS EQUIP / M	0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236 0.236 0.242 0.244 0.246 0.246 0.248 0.250 0.252 0.256 0.270 0.274 0.282 0.310 5.00%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400,00 74,400,00 386,500,00 486,500,00 65,173,00 Dry Hole Cost	\$	\$ 8,400.00 \$ 74,400.00 \$ 386,500.00 \$ 386,500.00 \$ 486,500.00 \$ 69,000.00 \$ 160,173.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00



Lea County, New Mexico

SHL: Sec. 31 25S-36E 230' FSL & 430' FWL BHL: Sec. 30 25S-36E 50' FNL & 380' FWL

Nandina Fed Com 25-36-31 121H AFE # 2019-002 Capital Expenditure

February 20, 2019



Date Prepared	
February 20, 2019	

AFE Type	Project	Well No.	Field Name	Cost Center	AFE No.
Capital	Nandina Fed Com 25-36-31	121H	Delaware	40770	2019-002

Location	County	State	We	ll Type
SHL: Sec. 31 25S-36E 230' FSL & 430' FWL	Loa	NM	Oil	Expl
BHL: Sec. 30 25S-36E 50' FNL & 380' FWL	Lea	INIVI	Gas	Prod

Estimate Type	Start Date	Completion Date	Formation	MD
Original				22,431'
Revised	July 16, 2019	September 14, 2019	Wolfcamp	TVD
Supplemental				12,447'

Project Description

Drill and Complete 2 Mile Wolfcamp Lateral and Tie In to Central Tank Battery.

Total Cost \$12,841,337.61

Comments on Associated Costs

Water disposal not included.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory, and well costs under term of the joint operating agreement, regulatory order, or other applicable agreement covering this well.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$20,000,000 (100% W.I.) of Combined Single Limit coverage for well control and related redrilling and clean-up/pollution expense covering drilling (through completion) with a \$250,000 (100% W.I.) retention.

Marketing Election

Ameredev sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Ameredev, you will be subject to all of the terms of such contracts. Upon written request to Ameredev, we will share with you the terms and conditions pursuant to which gas will be sold.

Ш	1	eı	ect	to	take	my	gas	ın	kınd	•

I elect to market my gas with Ameredev pursuant to the terms and conditions of its contracts.

Company	Approved By	Date



intangibles	Code		Dry Hole Cost		After Casing Point Cost	Total Cost
MISC PREPARATION COSTS	0,004	Ş	20,000.00	S		\$ 20,000.0
EASEMENT, ROW, AND ACQUISITION	0,006	\$	100,000.00	5		\$ 100,000.0
ROAD / LOCATION PREP / RESTORATION	0,008	\$	100,000.00	S		\$ 100,000.0
DRILLING RIG	0,010	\$	950,003.04	\$	90,200.00	5 1,040,203.0
COIL TUBING	0,012	\$		\$	130,000.00	\$ 130,000.0
FUEL	0.016	S	217,500.00	\$	2,500.00	\$ 220,000.0
TRAILER, CAMP, AND CATERING	0,018	5	36,670.00	Ş	19,305.00	\$ 55,975.0
WATER & SEPTIC	0,020	S	68,850.00	\$		\$ 68,850.0
SURFACE RENTALS	0,024	\$	86,630.00	\$	73,020.00	\$ 159,650.0
DRILL BITS	0.028	\$	87,000.00	\$	3,500.00	\$ 90,500.0
DOWNHOLE RENTALS	0.030	\$	17,775.00	\$	81,700.00	\$ 99,475.0
DIRECTIONAL DRILLING	0.032	\$	630,865.00	\$		\$ 630,865.0
COMPOSITE PLUGS	0.034	\$	10,002,50	\$	63,000.00	\$ 63,000.0
TUBING & BHA INSPECT & REPAIR	0.042	\$	10,803.50	\$	22 500 00	\$ 10,803.5
RENTAL TUBING	0.046	\$	01 510 60	\$	32,500.00	\$ 32,500.0
WELL CONTROL EQUIP / SERVICES	0.048	\$	91,519.60	\$	216,048.00	\$ 307,567.6
PUMP TRUCK / PRESSURE TESTING	0.054	\$	202 020 00	\$	1,000.00	\$ 1,000.0
MUD, ADDITIVES, AND CHEMICALS	0.060	5	303,920.00	5	312,400.00	\$ 616,320.0
FRAC PUMPING CHARGES	0.061	5	42 500 00	5	3,500,000.00	\$ 3,500,000.0
WATER RIGHTS / TRANSFER / STORAGE	0.062	\$	43,600.00	\$	724,500.00	\$ 768,100.0
SOLIDS CONTROL EQUIP / SERVICES	0.066	\$	102,072.00	\$	20.470.00	\$ 102,072.0
MUD / FLUIDS DISPOSAL CHARGES	0.068	\$	106,000.00	\$	28,430.00	\$ 134,430.0
CASING CREWS	0.070	\$	47,500.00	\$		\$ 47,500.0
CEMENTING	0.072	\$	290,000.00	\$		\$ 290,000.0
CASING / LINER / FLOAT EQUIPMENT	0.074	\$	41,500.00	\$	0.005.55	\$ 41,500.0
MOBILIZE & DEMOBILIZE	0.086	5	235,000.24	\$	3,000.00	\$ 238,000.2
SUPERVISION / CONTRACT	0.094	\$	198,000.00	\$	141,750.00	\$ 339,750.0
CONTRACT ROUSTABOUT	0.103	\$		\$	10,000.00	\$ 10,000.0
CONTRACT LANDWORK / SURVEY	0.114	\$		\$	10,000.00	\$ 10,000.0
REGULTRY / ENVIRON CONSULTANT	0.122	\$	10,050.00	\$	5,000.00	\$ 15,050.0
SAFETY AND EMERGENCY RESPONSE	0.124	\$	3,876.00	\$	9,340.00	\$ 13,216,0
GEOLOGY	0.186	\$	10,000.00	\$		\$ 10,000.0
FLOW TESTING / EQUIP	0.194	S		\$	109,125.00	\$ 109,125.0
MUD LOGGING	0.198	\$	100,000.00	\$	545.050.00	\$ 100,000.0
WIRELINE / PERF / PUMPDOWN COSTS	0.200	\$	110,000.00	\$	545,050.00	\$ 655,050,0
FACILITY ELECTRIC & AUTOMATION	0.258	\$	000 055 70	\$	70,500.00	\$ 70,500.0
Contingency	5.00%	\$	200,956.72	\$	309,093 40	\$ 510,050,1
Tax	6.25%	\$	251,195.90	\$		\$ 637,562.6
			4 471 307 00			
Total Intangible Cost		\$	4,471,287.00	\$	6,877,328.15	\$ 11,348,615.19
Tangibles - Well Equipment			4,471,287.00 Dry Hole Cost		6,877,328.15 After Casing Point Cost	Total Cost
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP	0.134	\$		\$	After Casing Point Cost	Total Cost
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP	0.136	\$		\$	After Casing Point Cost	Total Cost S S
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE	0.136 0.204	\$ \$ \$	Dry Hole Cost	\$ \$	After Casing Point Cost	Total Cost S S S
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE	0.136 0.204 0.206	\$ \$ \$		\$ \$ \$	After Casing Point Cost	Total Cost \$ -5 \$ -5 \$ -8,400.0
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING	0.136 0.204 0.206 0.208	\$ \$ \$ \$	Dry Hole Cost	\$ \$ \$ \$	After Casing Point Cost	Total Cost \$ - 5 5 - 5 5 - 8,400.0 \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DORIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING	0.136 0.204 0.206 0.208 0.210	\$ \$ \$ \$ \$	B,400.00	\$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$ -5 \$ -8,400.0 \$ 74,400.0
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING	0.136 0.204 0.206 0.208 0.210 0.212	\$ \$ \$ \$ \$ \$	Dry Hole Cost	\$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING	0.136 0.204 0.206 0.208 0.210 0.212 0.213	\$ \$ \$ \$ \$ \$	B,400.00	\$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$
Tangibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214	\$ \$ \$ \$ \$ \$ \$	B,400.00 74,400.00 386,500.00	\$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost 5 5 5 5 5 8,400.0 5 74,400.0 5 986,500.0 5
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING	0,136 0,204 0,206 0,208 0,210 0,212 0,213 0,214 0,216	\$ \$ \$ \$ \$ \$ \$ \$	B,400.00	\$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$ -5 5 -5 5 -8,400.0 5 -74,400.0 5 -386,500.0 5 -5 5 -486,500.0
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING	0,136 0,204 0,206 0,208 0,210 0,212 0,213 0,214 0,216	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00	\$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Tongibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING PRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	B,400.00 74,400.00 386,500.00	\$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Tongibles - Well Equipment Pippeline Mech Materials / Equip FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER / CHOKES DRILLING LINER	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost 5 5 5 8,400.0 5 74,400.0 5 386,500.0 5 486,500.0 5 69,000.0 5 160,173.0 5
Tongibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$
Tongibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER PORTURE OF THE PLANSER SOLATION PACKER PUMPING UNIT, ENGINE	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PPRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SSOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232	\$ S S S S S S S S S S S S S S S S S S S	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost 5 5 6 7 8 8,400.0 5 74,400.0 5 986,500.0 5 486,500.0 5 69,000.0 5 160,173.0 5 12,000.0 5 12,000.0
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.233 0.234	\$ S S S S S S S S S S S S S S S S S S S	8,400.00 74,400.00 386,500.00 486,500.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost 5 5 8,400.0 5 8,400.0 5 74,400.0 5 9,486,500.0 5 6,900.0 5 150,173.0 5 12,000.0 5 5 12,000.0 5 1-5 5 12,000.0 5 1-5 1-
Tongibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT LANK BATT / PROCESS EQUIP / MAINT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232	\$ S S S S S S S S S S S S S S S S S S S	8,400.00 74,400.00 386,500.00 486,500.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost 5
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWN HANDER DOWN HANDER DOWN HANDER TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT TANK BATT / PROCESS EQUIP / MAINT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost 5
Tongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING PRODUCTION CASING PRODUCTION CASING PRODUCTION CASING UIBING WELLHEAD / TREE / CHOKES PRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP MENT TANK BATT / PROCESS EQUIP / MAINT TONGIBLES - Lease Equipment LINE PIPE	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234	\$ S S S S S S S S S S S S S S S S S S S	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$
Tangibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING PREDUCTION CASING PREDUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT Tangibles - Lease Equipment LINE PIPE DOWERLINES & SUBSTATION	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.236	\$ S S S S S S S S S S S S S S S S S S S	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost \$
Tongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TOBING WELLHEAD / TREE / CHOKES PROBLICTION LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP SOWNHOLE LIFT EQUIP SOWNHOLE LIFT EQUIP / MAINT TANKIBLES & SUBSTATION TANKS, TANKS STEPS, STAIRS	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.232 0.232 0.234 0.236	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost	Total Cost 5
Tangibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING ORILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP TANK BATT / PROCESS EQUIP / MAINT Tangibles - Lease Equipment LINE PIPE DOWNERLINES & SUBSTATION TANKS, TANKS STEPS, STAIRS BATTERY (HEATER TREATERS)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.233 0.234 0.238 0.238	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost	Total Cost \$
Tongibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING ORILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP TONK BATT / PROCESS EQUIP / MAINT TONK BATT / PROCESS EQUIP / MAINT TONKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) BATTERY (HEATER TREATERS) BATTERY (HEATER TREATERS) BATTERY (SEPARATOR)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.233 0.234 0.236	\$ S S S S S S S S S S S S S S S S S S S	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00	Total Cost \$
Tongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING PRODUCTION CASING PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP SOLATION PACKER POWERLINES & SUBSTATION TANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) SATTERY (HEATER TREATERS) SATTERY (SEPSARATOR) SATTERY (GAS TREATING EQUIP)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.323 0.334 0.236 0.238 0.242 0.244 0.244 0.244 0.244 0.248	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00	Total Cost \$
Tongibles - Well Equipment PIPPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT TONGIBLES & SUBSTATION TANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (SATTER) GAS TERATING EQUIP) SATTERY (GAS TREATING EQUIP) SATTERY (MISC EQUIP) SATTERY (MISC EQUIP)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.222 0.232 0.234 0.236 0.234 0.242 0.244 0.246 0.248 0.252 0.248 0.252	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00	Total Cost \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP TANK BATT / PROCESS EQUIP / MAINT Tangibles - Lease Equipment LINE PIPE DOWERLINES & SUBSTATION PANKS, TANKS STEPS, STAIRS DATTERY (HEATER TREATERS) BATTERY (GAS TREATING EQUIP) SATTERY (GAS TREATING EQUIP) SATTERY (GMISC EQUIP) SATTERY (GMISC EQUIP) SATTERY (GMISC EQUIP) STOWN LINE (PIPE WH TO FACILITY)	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.232 0.233 0.234 0.244 0.246 0.244 0.246 0.248 0.250 0.255 0.255	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00	Total Cost \$
TORSIDIES - Well Equipment PIPPELINE MECH MATERIALS / EQUIP PARCILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING ORILLING LINER PRODUCTION CASING UBING WELLHEAD / TREE / CHOKES PRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP / MAINT FORISIBLES - LOSSE EQUI	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.228 0.222 0.233 0.234 0.236 0.238 0.242 0.242 0.244 0.246 0.248 0.250 0.252 0.252	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00 12,500.00	Total Cost \$
Tongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING NITERMEDIATE CASING REMEDIAL CASING PODILLING LINER PRODUCTION CASING FUBLING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIP SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (SAT REATING EQUIP) SATTERY (MISC EQUIP) LOW LINE (PIPE WH TO FACILITY) PIPELINE TO SALES METERS AND METERING EQUIPMENT	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.223 0.223 0.232 0.232 0.233 0.234 0.236	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00 12,500.00 30,000.00	Total Cost \$
Tongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TOBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT TONGIBLES & SUBSTATION TANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (GAS TREATING EQUIP) DATTERY (MISC EQUIP) PLOW LINE (PIPE WHI TO FACILITY) POPELLING EQUIP) PATTERY (MISC EQUIP) PLOWE LINES (PIPE WHI TO FACILITY) POPELLING LINE (PIPE WHI TO FACILITY) POPELLING LINE (PIPE WHI TO FACILITY) POPELLING LINE (PIPE WHI TO FACILITY) POPELLING TO SALES METERS AND METERING EQUIPMENT VALVES, FITTINGS, PROD INSTRUM	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.220 0.232 0.232 0.233 0.234 0.236 0.242 0.244 0.246 0.248 0.252 0.252 0.252 0.252 0.266 0.270 0.274 0.282	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00 12,500.00	Total Cost \$
Tongibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP PACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TOBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT TONGIBLES & SUBSTATION TANKS, TANKS STEPS, STAIRS SATTERY (HEATER TREATERS) SATTERY (SEPARATOR) SATTERY (SEPARATOR) SATTERY (GAS TREATING EQUIP) DATTERY (MISC EQUIP) PLOW LINE (PIPE WHI TO FACILITY) POPELLING EQUIP) PATTERY (MISC EQUIP) PLOWE LINES (PIPE WHI TO FACILITY) POPELLING LINE (PIPE WHI TO FACILITY) POPELLING LINE (PIPE WHI TO FACILITY) POPELLING LINE (PIPE WHI TO FACILITY) POPELLING TO SALES METERS AND METERING EQUIPMENT VALVES, FITTINGS, PROD INSTRUM	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.232 0.233 0.234 0.236 0.244 0.246 0.244 0.246 0.248 0.246 0.248 0.250 0.255 0.256 0.270 0.274 0.274	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 Ory Hole Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 After Casing Point Cost 42,500.00 24,800.00 12,500.00 25,000.00	Total Cost \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DOWNHOLE LIFT EQUIP DOWNHOLE LIFT EQUIPMENT TANK BATT / PROCESS EQUIP / MAINT Tangibles - Lease Equipment LINE PIPE POWERLINES & SUBSTATION PANKS, TANKS STEPS, STAIRS BATTERY (HEATER TREATERS) BATTERY (GAS TREATING EQUIP) BATTERY (GAS TREATING EQUIP) FLOW LINE (PIPE WH TO FACILITY) PIPELINE TO SALES METERS AND METERING EQUIPMENT MALVES, FITTINGS, PROD INSTRUM BUILDINGS	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.228 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.236 0.250 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.253	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 After Casing Point Cost 42,500.00 24,800.00 12,500.00 25,000.00	Total Cost \$
Tongibles - Well Equipment Pippeline Mech Materials / Equip FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING TUBING WELLHEAD / TREE / CHOKES DRILLING LINER HANGER SOLATION PACKER PUMPING UNIT, ENGINE SURFACE LIFT EQUIP DODOWNHOLE LIFT EQUIP DODOWNHOLE LIFT EQUIP TANK BATT / PROCESS EQUIP / MAINT TONKS ATT / PROCESS EQUIP / MAINT TONKS, TANKS STEPS, STAIRS BATTERY (HEATER TREATERS) BATTERY (HEATER TREATERS) BATTERY (MEATER TREATERS) BATTERY (MISC EQUIP) BATTERY (MISC	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.218 0.222 0.232 0.232 0.233 0.234 0.236 0.244 0.246 0.244 0.246 0.248 0.246 0.248 0.250 0.255 0.256 0.270 0.274 0.274	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8,400.00 74,400.00 386,500.00 486,500.00 Ory Hole Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 After Casing Point Cost 42,500.00 24,800.00 12,500.00 25,000.00	Total Cost \$
Tangibles - Well Equipment PIPELINE MECH MATERIALS / EQUIP FACILITY MECH MATERIALS / EQUIP DRIVE PIPE CONDUCTOR PIPE WATER STRING SURFACE CASING INTERMEDIATE CASING REMEDIAL CASING DRILLING LINER PRODUCTION CASING	0.136 0.204 0.206 0.208 0.210 0.212 0.213 0.214 0.216 0.217 0.228 0.220 0.222 0.232 0.233 0.234 0.236 0.236 0.236 0.250 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.252 0.253	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	B,400.00 74,400.00 386,500.00 486,500.00 65,173.00 Dry Hole Cost 51,048.65 63,810.81	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	After Casing Point Cost 69,000.00 95,000.00 12,000.00 10,000.00 After Casing Point Cost 42,500.00 24,800.00 12,500.00 25,000.00 16,040.00 20,050.00	Total Cost \$

STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION

APPLICATION OF AMEREDEV OPERATING, LLC FOR COMPULSORY POOLING AND APPROVAL OF A NON-STANDARD WELL LOCATION, LEA COUNTY, NEW MEXICO.

CASE NO. 20331

AFFIDAVIT OF PARKER FOY IN SUPPORT OF CASE NO. 20331

Parker Foy, of lawful age and being first duly sworn, declares as follows:

- 1. My name is Parker Foy. I work for Ameredev Operating, LLC as a Geologist.
- 2. I have previously testified before the New Mexico Oil Conservation Division as an expert witness in petroleum geology. My credentials as a petroleum geologist have been accepted by the Division and made a matter of record.
- 3. I am familiar with the application filed by Ameredev in this case, and I have conducted a geologic study of the lands in the subject areas.
 - 4. In this case, Ameredev is targeting the Wolfcamp formation.
- 5. Ameredev Exhibit B-1 is a locator map. It shows Ameredev's acreage in yellow and the path of the proposed wellbores for the proposed Nandina Fed Com 25 36 31 No. 101H Well, Nandina Fed Com 25 36 31 No. 103H Well, Nandina Fed Com 25 36 31 No. 112H Well, Nandina Fed Com 25 36 31 No. 114H Well, and Nandina Fed Com 25 36 31 No. 121H Well. Nearby producing wells are marked with a green dot.
- 6. **Ameredev Exhibit B-2** is a subsea structure map that I prepared off the top of the Wolfcamp formation. The contour interval is 100 feet. The structure map shows the Wolfcamp gently dipping to the southwest. The structure appears consistent across the proposed wellbore

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B
Case No. 20331
Submitted by: AMEREDEV OPERATING, LLC

Hearing Date: April 4, 2019

paths. I do not observe any faulting, pinchouts, or other geologic impediments to horizontal drilling.

- 7. **Ameredev Exhibit B-3** is a map showing the location of the wells used to create the stratigraphic cross-section in the next exhibit. These three wells from A to A' are representative of the geology in the area.
- 8. Ameredev Exhibit B-4 is a stratigraphic cross-section that I prepared displaying open-hole logs run over the Wolfcamp from three representative wells denoted from A to A'. For each well in the cross-section, the exhibit shows the following logs: gamma ray, resistivity, and porosity. The proposed target interval is labeled and marked. The logs in the cross-section demonstrate that the target interval, within the Wolfcamp, is consistent in thickness, across the entire proposed spacing unit.
- 9. In my opinion, each tract comprising the proposed spacing units will be productive and contribute more-or-less equally to production from the wellbore.
- 10. In my opinion, the granting of Ameredev's application in this is in the best interest of conservation, the prevention of waste, and protection of correlative rights.
- 11. Ameredev Exhibits A-1 through A-4 were either prepared by me or compiled under my direction and supervision.

ARKER FO

STATE OF TEXAS)
)
COUNTY OF TRAVIS)
SUBSCRIBED and SWOR	N to before me this 2nd day of April 2019 by Parker Foy. NOTARY PUBLIC

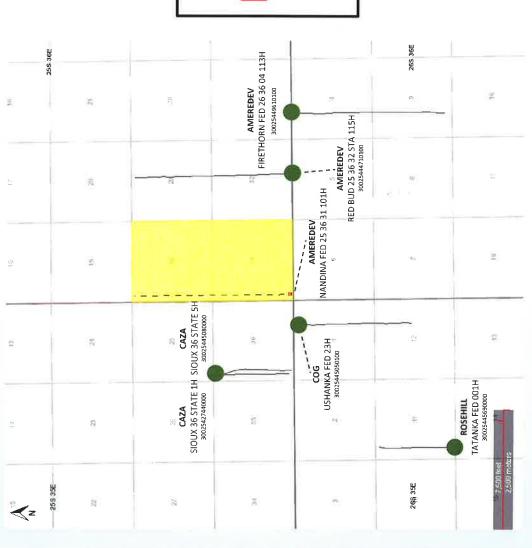
My Commission Expires:

12/5/2020

GORDON G. GALLET
Notary Public, State of Texas
Comm. Expires 12-05-2020
Netary ID 130921617

12244199_1

Wolfcamp Pool - Nandina Fed Com 25-36-31 101H

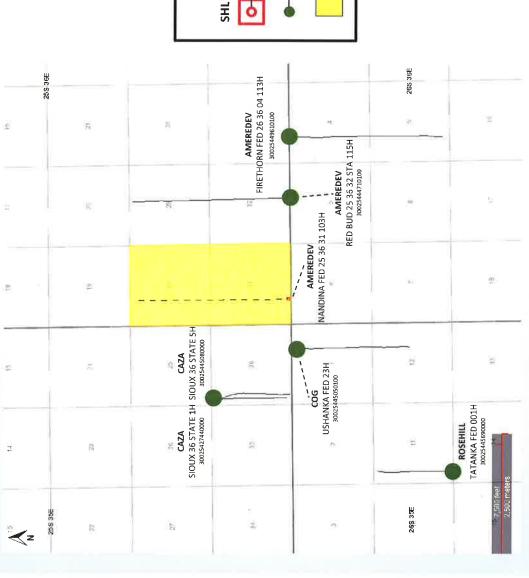






BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B-1
Case No. 20331
Submitted by: AMEREDEV OPERATING, LLC
Hearing Date: April 4, 2019

Wolfcamp Pool - Nandina Fed Com 25-36-31 103H







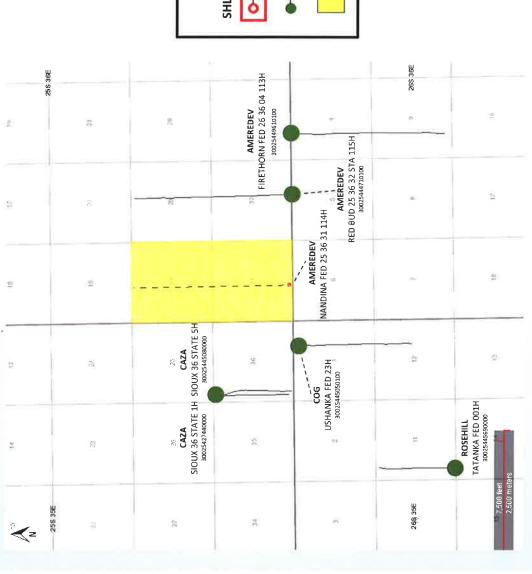
Wolfcamp Pool - Nandina Fed Com 25-36-31 112H







Wolfcamp Pool - Nandina Fed Com 25-36-31 114H







Wolfcamp B Pool - Nandina Fed Com 25-36-31 121H



SHL BHL

SHL BHL

Ameredev WFMP B Horizontal Locations

Producing WFMP B Wells

Ameredev Acreage

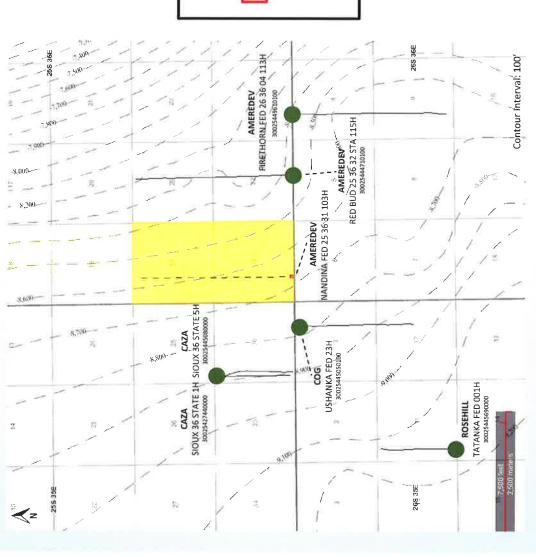






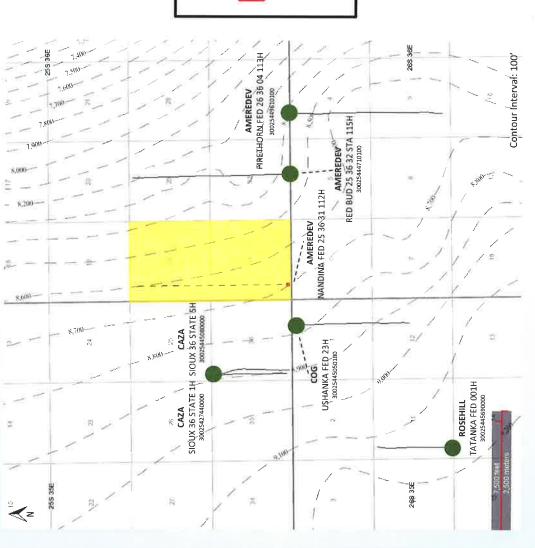
BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B-2
Case No. 20331
Submitted by: AMEREDEV OPERATING, LLC
Hearing Date: April 4, 2019





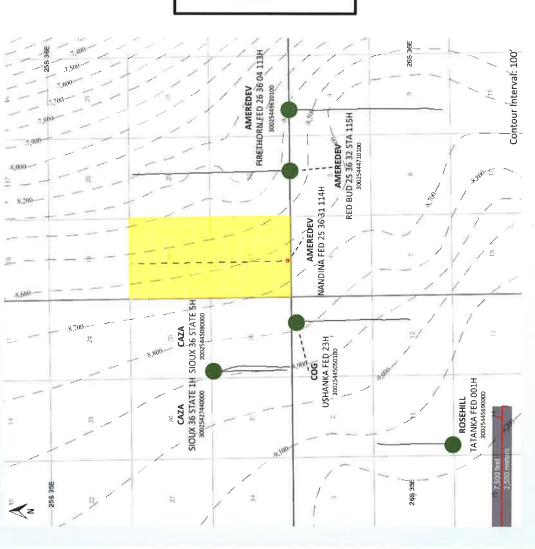












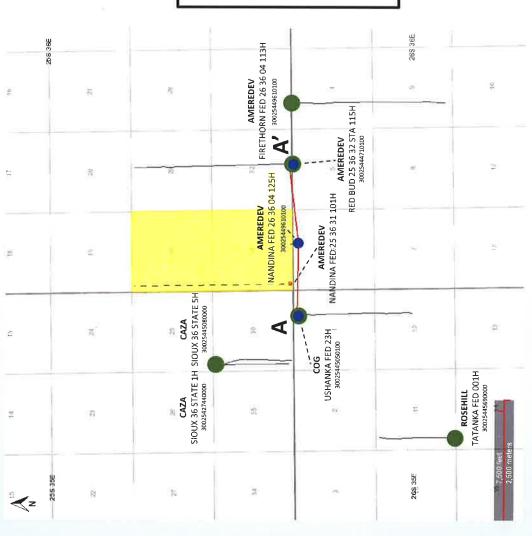


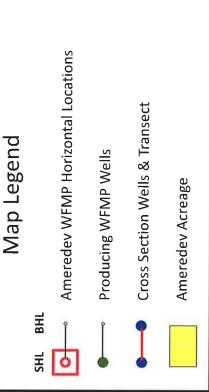






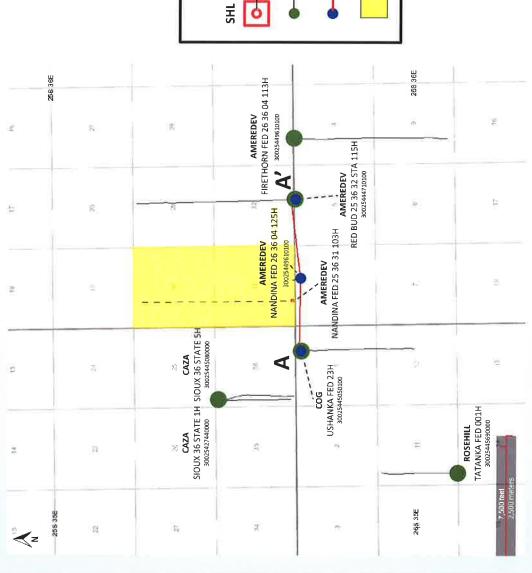


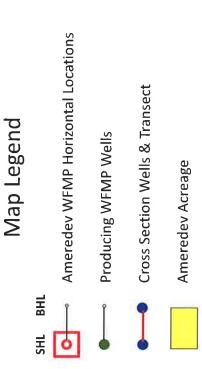




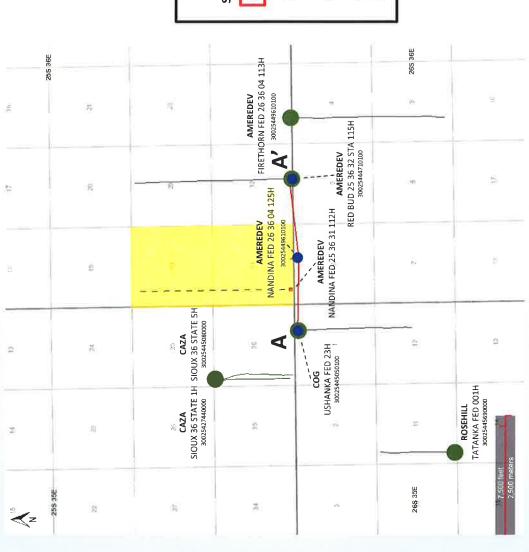






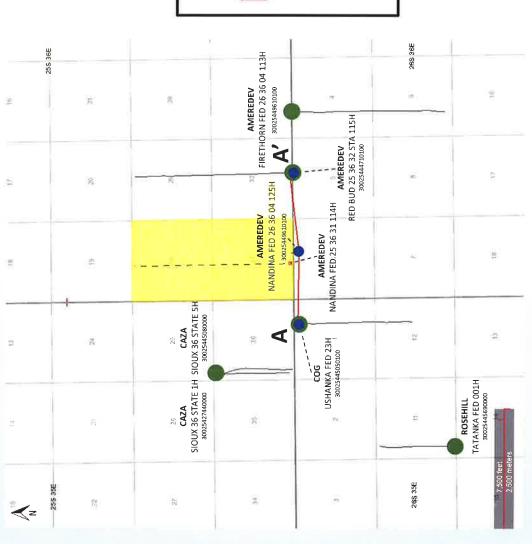






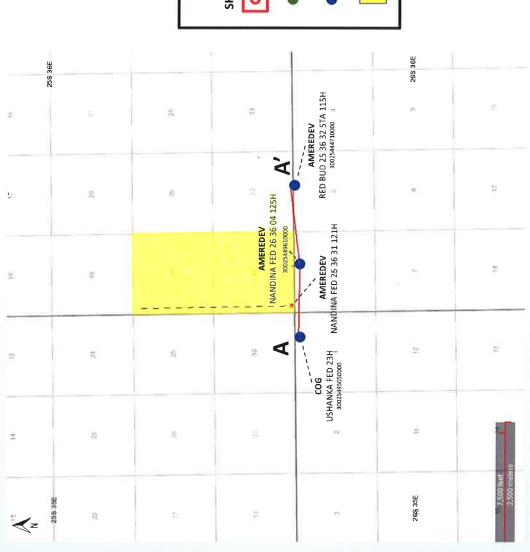
SHL BHL SHL BHL Ameredev WFMP Horizontal Locations Producing WFMP Wells Cross Section Wells & Transect Ameredev Acreage





SHL BHL SHL BHL Ameredev WFMP Horizontal Locations Producing WFMP Wells Cross Section Wells & Transect Ameredev Acreage

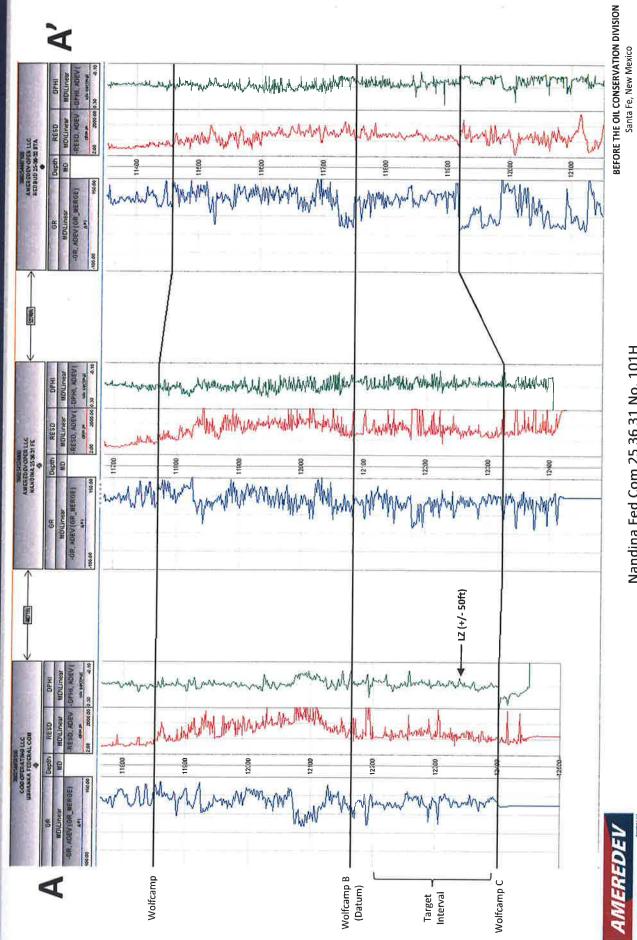




SHL BHL SHL BHL Map Legend SHL BHL Ameredev WFMP B Horizontal Locations Producing WFMP B Wells Cross Section Wells & Transect Ameredev Acreage



Wolfcamp B Pool - Stratigraphic Cross Section

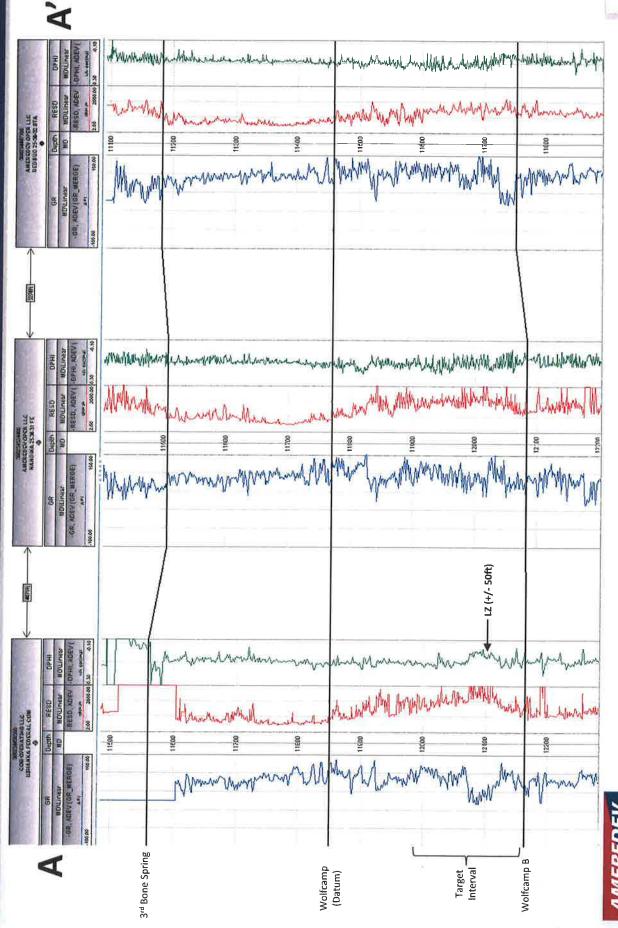


Nandina Fed Com 25 36 31 No. 101H



Case No. 20331 Submitted by: **AMEREDEV OPERATING, LLC** Hearing Date: April 4, 2019 Exhibit No. B-4

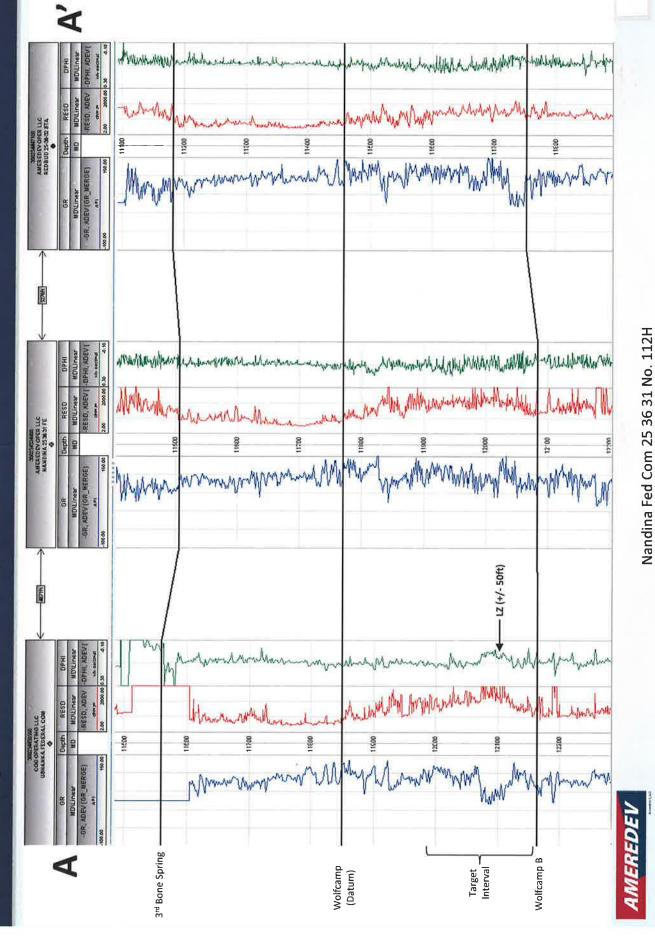
Wolfcamp Pool - Stratigraphic Cross Section



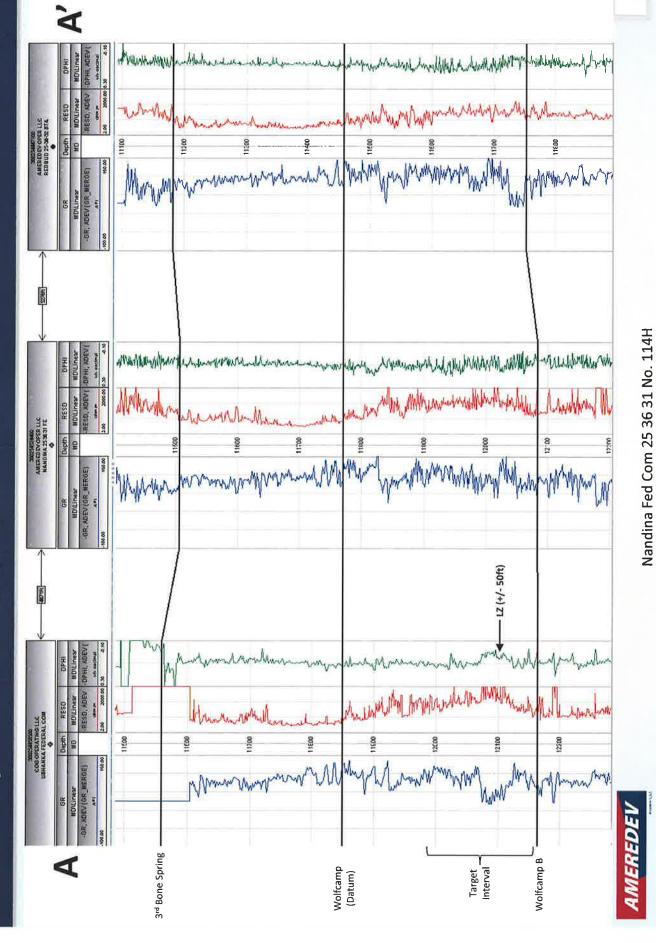


Nandina Fed Com 25 36 31 No. 103H

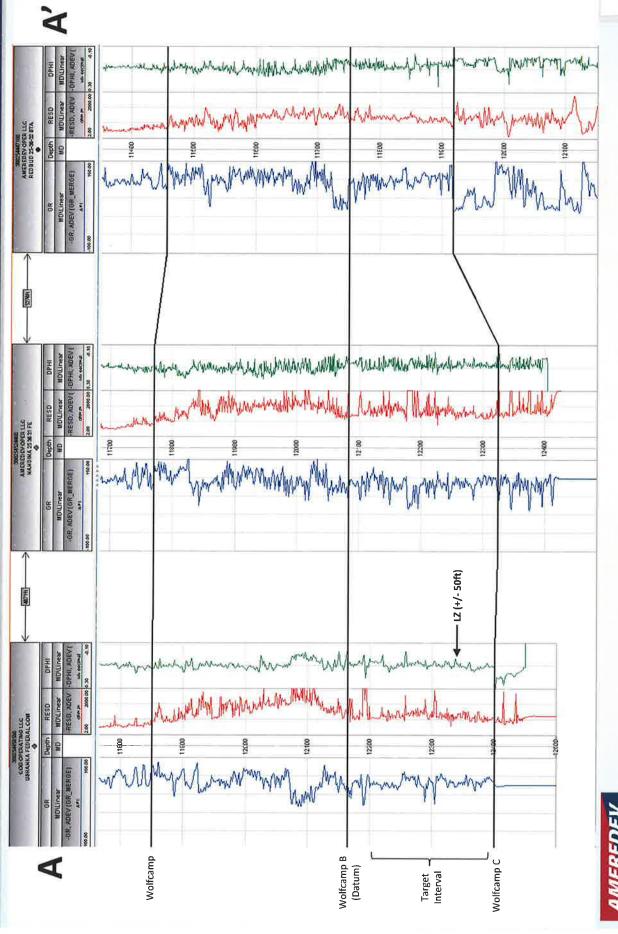
Wolfcamp Pool - Stratigraphic Cross Section



Wolfcamp Pool - Stratigraphic Cross Section



Wolfcamp B Pool - Stratigraphic Cross Section



Nandina Fed Com 25 36 31 No. 121H



STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION

APPLICATION OF AMEREDEV OPERATING, LLC FOR COMPULSORY POOLING AND APPROVAL OF A NON-STANDARD WELL LOCATION, LEA COUNTY, NEW MEXICO,

CASE NO. 20331

AFFIDAVIT

STATE OF NEW MEXICO) ss. COUNTY OF SANTA FE)

Julia Broggi, attorney in fact and authorized representative of Ameredev Operating, LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application has been provided under the notice letters and proof of receipts attached hereto.

Julia Broggi

SUBSCRIBED AND SWORN to before me this 3rd day of April 2019 by Julia Broggi.

Notary Public

My Commission Expires:

Expire: August 26,202)

OF NEW W



Adam G. Rankin Associate Phone (505) 988-4421 Fax (505) 983-6043 agrankin@hollandhart.com

March 15, 2019

VIA CERTIFIED MAIL CERTIFIED RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: A

Application of Ameredev Operating LLC for compulsory pooling,

Lea County, New Mexico.

Nandina Fed Com 25 36 31 No. 101H Nandina Fed Com 25 36 31 No. 103H Nandina Fed Com 25 36 31 No. 112H Nandina Fed Com 25 36 31 No. 114H Nandina Fed Com 25 36 31 No. 121H

Ladies & Gentlemen:

This letter is to advise you that Ameredev Operating LLC has filed the enclosed application with the New Mexico Oil Conservation Division. This application will be set for hearing before a Division Examiner at 8:15 a.m. on April 4, 2019 and the status of the hearing can be monitored at http://www.emnrd.state.nm.us/ocd/. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Offices, located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases are required by Division Rule 19.15.4.13.B to file a Pre-hearing Statement four business days in advance of a scheduled hearing. This statement must be filed at the Division's Santa Fe office at the above specified address and should include: the names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and identification of any procedural matters that are to be resolved prior to the hearing.

If you have any questions about this matter, please contact Brandon Forteza at (737) 300-4721 or bforteza@ameredev.com.

Adam G. Rankin

ATTORNEY FOR AMEREDEV OPERATING LLC



Shipment Confirmation Acceptance Notice

Note to Mailer: The labels and volume associated to this form online, must match the labeled packages being presented to the USPS® employee with this form.

AMEREDEV - NANDINA WELLS CM# 100091.0001 20190404 DOCKET NOTICE LIST

03/12/2019
HOLLAND & HART LLP
110 N GUADALUPE ST # 1
SANTA FE
NM ZIP+4®_87501

Type of Mail	Volume
Priority Mail Express®*	
Priority Mail®	0
First-Class Package Service®	
Returns	
International*	
Other	10
Total	10

^{*}Start time for products with service guarantees will begin when mail arrives at the local Post Office™ and items receive individual processing and acceptance scans.

B. USPS Action

- Note to RSS Clerk:
 1. Home screen > Mailing/Shipping > More
 2. Select Shipment Confirm
- Scan or enter the barcode/label number from PS Form 5630
- Confirm the volume count message by selecting Yes or No
 Select Pay and End Visit to complete transaction

USPS EMPLOYEE: Please scan upon pickup or receipt of mail. Leave form with customer or in customer's mail receptacle.

USPS SCAN AT ACCEPTANCE

9275 0901 1935 6200 0013 2144 86



-
~
lail
2
4
<u>_w</u>
$\overline{}$
=
73
=
=
0
ပ
0000
ă
-
-
0
иL
~
000
Õ
×
ш
-
≥′
_
=
-=
-10
2
-
⊏
Firn
ш

Holland & Hart LLP 110 N Guadalupe St # 1 Santa Fe NM 87501 Certified Mail	vice											
□ Prio	Adult Signature Required		Affix Stamp Here (if issued as an international certificate of mailing or for additional copies of this rece Postmark with Date of Rec	Affix Stamp Here (if issued as an international certificate of mailing or for additional copies of this receipt). Postmark with Date of Receipt.				L		: a		
USPS Tracking/Article Number Address	Addressee (Name, Street, City, State, & ZIP Code M)	Postage	(Extra Ha Service) Ch Fee	Handling Actual Value Charge if Registered	lnsured	Due Sender if COD	ASR	ASRD Fee F	RD RR Fee Fee	SC	SCRD Fee	공 공 공
9214 8901 9403 8380 0026 27 A H COLE ANVA ALBERT H COLE ANV ALBERT H COLE AND ALBERT	A H COLE AKIA ALBERT H COLE AND HELEN JEAN COLE 524 NW 42ND STREET OKLAHOMA CITY OK 73:18	0.65	3.50	ən					1.60			
2. 9214 8901 9403 8380 0026 34 DONALD WOODS 33	DONALD WOODS 3385 BALTIC AVE LONG BEACH CA 90810	0.65	3.50	lsv ni 000					1.60		легу	
3. 9214 8901 9403 8380 0026 41 NANGY CAROLYN H	NANCY CAROLYN HALEY PO BOX 86 DILLON CO 80435	0.65	3.50	ver \$50,			ired		1.60		cted Del	
4. 9214 8901 9403 8380 0026 58 GENEVALOUISE M	GENEVA LOUISE MAGARO 9535 WESTPHALIA ROAD MATTITUCK NY 11952	0.65	3.50	o pue pə	15		nke Redn				n Restr	guilbash
5. 9214 8901 9403 8380 0026 65 HELEN HUDGENS F	HELEN HUDGENS FERRELL 1824 RAIN TREE FLAGSTAFF AZ 86004	0.65	3.50	Register			lt Signati	A enuten	estricte @ruteЯ	nature C	itsmrifn	1 Isiana?
6. 9214 8901 9403 8380 0026 72 ROWENA LYNN DO:	ROWENA LYNIN DOSS 11322 N GALE ST ELGIN IL 60120	0.65	3.50	arge - if			nbA		1		ature Co	
7. 9214 8901 9403 8380 0026 89 KASSANDRA DAWN	KASSANDRA DAWN DITTMER 464 S 150 E WINS UT 84738	0.65	3.50	dO gailb				/	1.60		ngi2	
8, 9214 8901 9403 8380 0026 96 NATHAN ALLAN DIT	NATHAN ALLAN DITTMER 4601 HW 91 ENOCH UT 84727	0.65	3.50	nsH					1.60			
Total Number of Pieces Total Number of Pieces Postr Listed by Sender Received at Post Office 10	Postmaster, Per (Name of receiving employee)		_	-								

Mail	
ble	l
inta	l
S	l
Ac	l
For	l
Book	
ā	l
ailing	
ž	l
Firm	
	ı

1TES	VICE ®
TED ST	TAL SER
UNI	POS

Name and Address of Sender	Check type of mail or service											ĺ
	☐ Adult Signature Required ☐ Priority Mail Express											
	Delivery	V 55.										
110 N Guadalupe St # 1	1	ATIIX STAI	Ашх этатр неге									
Santa Fe NM 87501		(if issued a	(if issued as an international	tional								
	☐ Certified Mail Restricted Delivery Merchandise	certificate	certificate of mailing or for	for								
	☐ Collect on Delivery (COD) ☐ Signature Confirmation	Postmark	additional copies of this receipt). Postmark with Date of Receipt	s receipt). f Receipt								
	☐ Insured Mail ☐ Signature Confirmation ☐ Priority Mail Restricted Delivery											
USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code [™])	Postage (Extra	Handling	Actual Value Insured		ASR	ASRD	8	RR SC	SCRD	HS Q	F
	i.	Service) Fee	$\overline{}$	if Registered Valu	sender if COD	Fee		_	_	_		o o
9. 9214 8901 9403 8380 0027 02	MARY ANN PRALL 904 S ERIE AVENUW TULSA OK 74112	0.65 3.50							1.60			
			Э									_
			nį									-
10. 9214 8901 9403 8380 0027 19	BLACKBEARD RESOURCES LLC 1751 RIVER RUN SUITE 405 FORT WORTH TX	0.65 3.50	5 V						1.60			
	76107		u							_		_
			! 0					_		/J6	_	
			00				-/			ĐΛ		
			'0				ue			ΙĮΘ		
			9\$				λį					
) I			pe	lə(u	_		
			9Λ(nir	ا ۵	٨	Οį.		_	
			Þβ			ηb	pə;				-	
			ามเ			<u>В</u>	loi		_	-		10
			e p			. 6	1je					_
			Э			ın	Э	\rightarrow	-1	\dashv	-	
			ıəţ			jei	ત્ર ક	_		-	_	
			sil			uß	ıre	_	_	_		
			ςeĉ			!S	ıje	itse	Re.	nifi	əd	_
			귀 1			ur	uß	-	+	+	+	Т
			.j -			ıp7	is:	l	!8			-
			Э			1	ווָנָ	_		Ire		
			arg				npy			911		
			ч				7			ur		Γ
) E)!S		_
			ĵu									
			ilb									
			gu									
			Н									
Total Number of Pieces Total Number of Pieces	Postmaster Per (Name of receiving employee)											
Listed by Sender Received at Post Office	(poloding fillinger) to the property of the pr											
PS Form 3877 . April 2015 (Page 2 of 2)	Complete in Ink	acv Notice: F	or more ir	Privacy Notice: For more information on USPS privacy policies, visit usps, com/privacypolicy.	SPS priva	cv polic	ies. vis	sit ust	S.con	/priva	cvpoli	5
)	-	2		,	1	- 16	j.



Shipment Confirmation Acceptance Notice

Note to Mailer: The labels and volume associated to this form online, must match the labeled packages being presented to the USPS® employee with this form.

AMEREDEV - NANDINA WELLS CM# 100091.0001 20190404 DOCKET NOTICE LIST

Shipment Date:	03/12/2019
Shipped From:	
Name:	HOLLAND & HART LLP
Address:	110 N GUADALUPE ST # 1
City:	SANTA FE
State:	NM ZIP+4® 87501

Type of Mail	Volume
Priority Mail Express®*	
Priority Mail®	0
First-Class Package Service®	
Returns	
International*	
Other	10
Total	10

^{*}Start time for products with service guarantees will begin when mail arrives at the local Post Office™ and items receive individual processing and acceptance scans.

B. USPS Action

- Note to RSS Clerk:
 1. Home screen > Mailing/Shipping > More
 2. Select Shipment Confirm

 - Scan or enter the barcode/label number from PS Form 5630
- Confirm the volume count message by selecting Yes or No
 Select Pay and End Visit to complete transaction

USPS EMPLOYEE: Please scan upon pickup or receipt of mail. Leave form with customer or in customer's mail receptacle.

USPS SCAN AT ACCEPTANCE

9275 0901 1935 6200 0013 2144 86

	@
5	ĮΨ
7	ž
2	E
a	7
TE	7
⋛	S
7	P
W	
	M

						•	IIIII Maiiiiig Door I of Accoullable Maii	2		5		2	֭֡֝֜֝֜֜֜֝֜֜֜֜֜֝֓֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	5
Name and Address of Sender Holland & Hart LLP 110 N Guadalupe St # 1 Santa Fe NM 87501	Check type of mail or service Adult Signature Required Delivery Registered Mail Adult Signature Restricted Delivery Registered Mail Certified Mail Certified Mail Restricted Delivery Merchandise Collect on Delivery (CDD) Signature Confirmation Insured Mail Signature Confirmation Insured Mail Restricted Delivery	Affix (if issu certific additic	Affix Stamp Here (if issued as an internoetificate of mailing o additional copies of the Postmark with Date	Affix Stamp Here (if issued as an international certificate of mailing or for additional copies of this receipt). Postmark with Date of Receipt.	onal or receipt). Receipt.					Į				
USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage Si	(Extra Fee Fee	Handling Charge	Actual Value if Registered	Insured Value	Due Sender if COD	ASR Fee	ASRD Fee	S 5 - A	Fee F	SC SC Fee	SCRD S	Fee Fee
1. 9214 8901 9403 8380 0026 27	A H COLE AWA ALBERT H COLE AND HELEN JEAN COLE 524 NW 42ND STREET OKLAHOMA CITY OK 73118	0.65	3.50	ər						-	1.60			<u> </u>
2. 9214 8901 9403 8380 0026 34	DONALD WOODS 3385 BALTIC AVE LONG BEACH CA 90810	0.65	3.50	ilsv ni 000						-	1.60	71,1071	AGI)	1
3. 9214 8901 9403 8380 0026 41	NANCY CAROLYN HALEY PO BOX 86 DILLON CO 80435	0.65	3.50	ver \$50,				ired	Deliver	+	09:1	 	lled hair	
4. 9214 8901 9403 8380 0026 58	GENEVA LOUISE MAGARO 3535 WESTPHAL'A ROAD MATTITUCK NY 11952	0.65	3.50	o pue pə			e de	nke Redn	estricted	l Deliver		emrifno	n Restr	guilbash
5. 9214 8901 9403 8380 0026 65	HELEN HUDGENS FERRELL 1824 RAIN TREE FLAGSTAFF AZ 86004	0.65	3.50	Register				lt Signat	A eruten		Returg			2becigi i
6. 9214 8901 9403 8380 0026 72	ROWENA LYNN DOSS 11322 N GALE ST ELGIN IL 60120	0.65	3.50	arge - if				np∀	gi 2 Ilub <i>f</i>		091			
7. 9214 8901 9403 8380 0026 89	KASSANDRA DAWN DITTMER 464 S 150 E IVINS UT 84738	0.65	3.50	dD gailb					,	-	1.60	30:3	ເທີເຣ	
8. 9214 8901 9403 8380 0026 96	NATHAN ALLAN DITTMER 4601 HW 91 ENOCH UT 84727	59.0	3.50	nsH						-	1.60			
Total Number of Pieces Listed by Sender Received at Post Office	Postmaster, Per (Name of receiving employee)]
PS Form 3877 , April 2015 (Page 1 of 2) PSN 7530-02-0098	Complete in Ink	acy Notic	e: For r	nore inf	Privacy Notice: For more information on USPS privacy policies, visit usps.com/privacypolicy.	n USP	S privac	y polic	ies, vi	sit us	os.con	n/priv.	асуро	olicy.

	ľ
_	_
_	2
C	Ö
+	2
2	
=	2
3	
- >	1
- 5	ł
9	J
<	ĺ
-	
્	
ш	
	_
-	
ς	2
Š	3
N	i
ш	
- >	
.5	
H	
-	
_	4
2	•
_	_
۶.	
t	
2	
ü	

TES	/ICE®
TED STA	TAL SERV
IND	POS
	7

POSTAL SERVICE®							ш	Firm Mailing Book For Accountable Mail	ailing	Bool	k For	Acc	ounta	ble	Mail
Name and Address of Sender Holland & Hart LLP 110 N Guadalupe St # 1 Santa Fe NM 87501		ess r nation ry	Affix (if iss certif addit Post	Affix Stamp Here (if issued as an intern cortificate of mailing cadditional copies of the Postmark with Date	1 62.50	onal or receipt). Receipt.									
USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code [™])		Postage	(Extra Service) Fee	Handling Charge	Actual Value if Registered	Insured	Due Sender if COD	ASR Fee	ASRD Fee	P. Fee	RR Be	SC SC Fee F	SCRD Fee	Fe S
9, 9214 8901 9403 8380 0027 02	MARY ANN PRALL 904 S ERIE AVENUW TULSA OK 74112		0.65	3.50	ən							1.60			
10. 9214 8901 9403 8380 0027 19	BLACKBEARD RESOURCES LLC 1751 RIVER RUN SUITE 405 FORT WORTH TX 76107		0.65	3,50	lsv ni 00(1.60	3	лецу	
					ver \$50,				bəri	Deliver	/		-	lied bero	
			*		o pue pə				nre Requ	betricted	l Deliver		emilino	1	guilbash
					Register				lt Signatı	R anutan	estricte	Return			Special
					arge - if				nbA	gi2 JlubA	A			od eruta	-
					dD gailb		1			/				ມβເຣ	1
					nsH										
Total Number of Pieces Total Number of Pieces Listed by Sender Received at Post Office 10	Postmaster, Per (Name of receiving employee)	yee)			-							1			
PS Form 3877 , April 2015 (Page 2 of 2)	2) Complete in lnk	Priva	cy Noti	ce: For	more inf	Privacy Notice: For more information on USPS privacy policies, visit usps.com/privacypolicy.	on USP	S priva	y poli	cies, v	isit us	ps.co	m/priv	acyp	olicy.

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

> Beginning with the issue dated March 17, 2019 and ending with the issue dated March 17, 2019.

Publisher

Sworn and subscribed to before me this 17th day of March 2019.

Business Manager

My commission expires January 29, 2023



OFFICIAL SEAL **GUSSIE BLACK** Notary Public State of New Mexico My Commission Expires 1-24-23

e Black

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL

LEGAL

LEGAL NOTICEMARCH 17, 2019

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO

The State of New Mexico through its Oil Conservation Division hereby gives notice pursuant to law and the Rules and Regulations of the Division of the following public hearing to be held at 8:15 A.M. on April 4, 2019, in the Oil Conservation Division Hearing Room at 1220 South St. Francis, Santa Fe, New Mexico, before an examiner duly appoint for the hearing. If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing, please contact: Florene Davidson at 505-476-3458 or through the New Mexico Relay Network, 1-800-659-1779 by March 25, 2019. Public documents, including the agenda and minutes, can be provided in various accessible forms. Please contact Florene Davidson if a summary or other type of accessible form is needed.

STATE OF NEW MEXICO TO: All named parties and persons having any right, title, interest or claim in the following case and notice to the public.

(NOTE: All land descriptions herein refer to the New Mexico Principal Meridian whether or

TO: All overriding royalty interest owners and pooled parties, including: A.H. Cole, a/k/a Albert H. Cole and Helen Jean Cole, their heirs and devisees; Donald Woods, his heirs and devisees; Nancy Carolyn Haley, her heirs and devisees; Geneva Louise Magaro, her heirs and devisees; Helen Hudgens Ferrell, her heirs and devisees; Rowena Lynn Doss, her heirs and devisees; Kassandra Dawn Dittmer, her heirs and devisees; Nathan Allan Dittmer, his heirs and devisees; Mary Ann Prall, her heirs and devisees; Blackbeard Resources, LLC.

Case No. 20331: Application of Ameredev Operating LLC for compulsory pooling and approval of a non-standard well location, Lea County, New Mexico. Applicant in the above-styled cause seeks an order (1) pooling all uncommitted interests in the Wolfcamp formation [JAL; Wolfcamp, West (33813)] in the 640.40-acre horizontal spacing unit comprised of the W/2 of Section 30 and the W/2 of Section 31, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico, and (2) approving a non-standard location for a proposed well. Ameredev seeks to dedicate the above-referenced horizontal spacing unit to the following proposed wells:

The Nandina Fed Com 25 36 31 No. 101H Well to be drilled from a surface hole location in the SW/4 SW/4 (Unit M) of Section 31 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 30;
The Nandina Fed Com 25 36 31 No. 103H Well to be drilled from a surface hole location in the SE/4 SW/4 (Unit N) of Section 31 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 30;
The Nandina Fed Com 25 36 31 No. 112H Well to be drilled from a surface hole location in the SW/4 SW/4 (Unit M) of Section 31 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 30;
The Nandina Fed Com 25 36 31 No. 114H Well to be drilled from a surface hole location in the SE/4 SW/4 (Unit N) of Section 31 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 30; and
The Nandina Fed Com 25 36 31 No. 121H Well to be drilled from a surface hole location in the SW/4 SW/4 (Unit M) of Section 31 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 30.

The completed interval for the proposed Nandina Fed Com 25 36 31 No. 112H Well will be within 330' of the quarter-quarter line separating the W/2 W/2 from the E/2 W/2 of Sections 30 and 31 to allow inclusion of this acreage into a standard 640.40-acre horizontal spacing unit. The completed intervals for the proposed Nandina Fed Com 25 36 31 No. 101H, Nandina Fed Com 25 36 31 No. 103H, Nandina Fed Com 25 36 31 No. 121H will remain within the standard setback as required by the Statewide rules for oil wells. The completed interval for the proposed Nandina Fed Com 25 36 31 No. 114H will be at an unorthodox location 2318 feet from the west line, thereby encroaching on the acreage to the east of the horizontal spacing unit. Since the proposed wells will be simultaneously drilled and completed, Ameredev requests an extension of the time period to drill and complete the initial well from 120 days to 365 days. Also, to be considered will be the cost of drilling and completing the well, the supervision, designation of Ameredev Operating LLC as operator, and a 200% charge for risk involved in drilling and completing the well. Said area is located approximately 7 miles southwest of Jai, New Mexico.

67100754

00225965

HOLLAND & HART LLC PO BOX 2208 SANTA FE., NM 87504-2208

> BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico

> > Exhibit No. D Case No. 20331

Submitted by: AMEREDEV OPERATING, LLC

Hearing Date: April 4, 2019