Form 3160-3
(June 2015)

OCD – HOBBS
10/30/2018
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM137471

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
GOLDEN BELL FED COM 26 36 06 115H

GOLDEN BELL 26 36 06 FEDERAL COM [322777]

2. Name of Operator
AMEREDEV OPERATING LLC **[372224]**

9. API Well No.
30-025-45311

3a. Address
5707 Southwest Parkway, Building 1, Suite 275 Austin TX

3b. Phone No. *(include area code)*
(737)300-4700

10. Field and Pool, or Exploratory **98234**
WC-025 G-09 S263619C / WOLFCAMP

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface LOT O / 200 FSL / 2350 FEL / LAT 32.0801265 / LONG -103.3032618
At proposed prod. zone SWSE / 200 FSL / 2318 FEL / LAT 32.0510834 / LONG -103.3031112

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 31 / T25S / R36E / NMP

14. Distance in miles and direction from nearest town or post office*
6.5 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
200 feet

16. No of acres in lease
360

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
4330 feet

19. Proposed Depth
12150 feet / 22514 feet

20. BLM/BIA Bond No. in file
FED: NMB001478

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3014 feet

22. Approximate date work will start*
02/01/2019

23. Estimated duration
90 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Christie Hanna / Ph: (737)300-4723	08/01/2018

Title
Senior Engineering Technician

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Christopher Walls / Ph: (575)234-2234	10/24/2018

Title	Office
Petroleum Engineer	CARLSBAD

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

GCP Rec 10/26/2018

APPROVED WITH CONDITIONS

KZ 10/30/2018

REQUIRES NSL

(Continued on page 2)

Approval Date: 10/24/2018

*(Instructions on page 2)

APD ID: 10400032648 **Submission Date:** 08/01/2018

Operator Name: AMEREDEV OPERATING LLC **Federal/Indian APD:** FED

Well Name: GOLDEN BELL FED COM 26 36 06 **Well Number:** 115H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Application

Section 1 - General

APD ID: 10400032648 **Tie to previous NOS?** 10400030260 **Submission Date:** 08/01/2018

BLM Office: CARLSBAD **User:** Christie Hanna **Title:** Senior Engineering Technician

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM137471 **Lease Acres:** 360

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO **APD Operator:** AMEREDEV OPERATING LLC

Operator letter of designation:

Operator Info

Operator Organization Name: AMEREDEV OPERATING LLC

Operator Address: 5707 Southwest Parkway, Building 1, Suite 275 **Zip:** 78735

Operator PO Box:

Operator City: Austin **State:** TX

Operator Phone: (737)300-4700

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Mater Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** WC-025 G-09 S263620C **Pool Name:** WOLFCAMP

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** GOLDEN BELL **Number:** 115H

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 6.5 Miles **Distance to nearest well:** 4330 FT **Distance to lease line:** 200 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: GOLDEN_BELL_FED_COM_26_36_06_115H___BLM_LEASES_20180731161153.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___VICINITY_MAP_20180731161157.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___EXHIBIT_2A_2B_20180731161156.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___C_102_SIG_20180801093846.pdf

Well work start Date: 02/01/2019 **Duration:** 90 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 19642

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	200	FSL	2350	FEL	25S	36E	31	Lot O	32.0801265	-103.3032618	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137469	3014	0	0

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDENBELL FED COM 26 36 06 [redacted] **Well Number:** 115H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
KOP Leg #1	231	FSL	2460	FEL	25S	36E	31	Aliquot SWSE	32.0802107	-103.3036158	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137469	-8563	11579	11577
PPP Leg #1	200	FSL	2350	FEL	25S	36E	31	Aliquot SWSE	32.0801265	-103.3032618	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137469	3014	0	0
PPP Leg #1	0	FNL	2419	FEL	25S	36E	31	Aliquot SWSE	32.0795767	-103.3034851	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137469	-9025	12116	12039
PPP Leg #1	0	FNL	2419	FEL	26S	36E	6	Aliquot NWNE	32.0795767	-103.3034851	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137471	-9025	12116	12039
PPP Leg #1	5283	FNL	2318	FEL	26S	36E	6	Aliquot SWSE	32.0650559	-103.3031356	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137471	-9136	17430	12150
EXIT Leg #1	5283	FNL	2318	FEL	26S	36E	7	Aliquot NWNE	32.0650559	-103.3031356	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137472	-9136	17430	12150
BHL Leg #1	200	FSL	2318	FEL	26S	36E	7	Aliquot SWSE	32.0510834	-103.3031112	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 137472	-9136	22514	12150

Drilling Plan

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	RUSTLER ANHYDRITE	3014	1066	1066	ANHYDRITE	NONE	No
2	SALADO	1508	1506	1506	SALT	NONE	No
3	TANSILL	-220	3234	3234	LIMESTONE	NONE	No
4	CAPITAN REEF	-719	3733	3733	LIMESTONE	USEABLE WATER	No
5	LAMAR	-2019	5033	5033	LIMESTONE	NONE	No
6	BELL CANYON	-2054	5068	5068	SANDSTONE	NATURAL GAS,OIL	No

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FEDCOM 26 36 06 **Well Number:** 115H

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
7	BRUSHY CANYON	-4097	7111	7111	SANDSTONE	NATURAL GAS,OIL	No
8	BONE SPRING LIME	-5322	8336	8336	LIMESTONE	NONE	No
9	BONE SPRING 1ST	-6698	9712	9712	SANDSTONE	NATURAL GAS,OIL	No
10	BONE SPRING 2ND	-7257	10271	10271	SANDSTONE	NATURAL GAS,OIL	No
11	BONE SPRING 3RD	-7844	10858	10858	LIMESTONE	NATURAL GAS,OIL	No
12	BONE SPRING 3RD	-8442	11456	11456	SANDSTONE	NATURAL GAS,OIL	No
13	WOLFCAMP	-8706	11720	11720	SHALE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M **Rating Depth:** 15000

Equipment: 10M BOPE SYSTEM WILL BE USED AFTER THE SURFACE CASING IS SET. A KELLY COCK WILL BE KEPT IN THE DRILL STRING AT ALL TIMES. A FULL OPENING DRILL PIPE STABBING VALVE WITH PROPER DRILL PIPE CONNECTIONS WILL BE ON THE RIG FLOOR AT ALL TIMES.

Requesting Variance? YES

Variance request: Co-Flex Choke Line

Testing Procedure: See attachment

Choke Diagram Attachment:

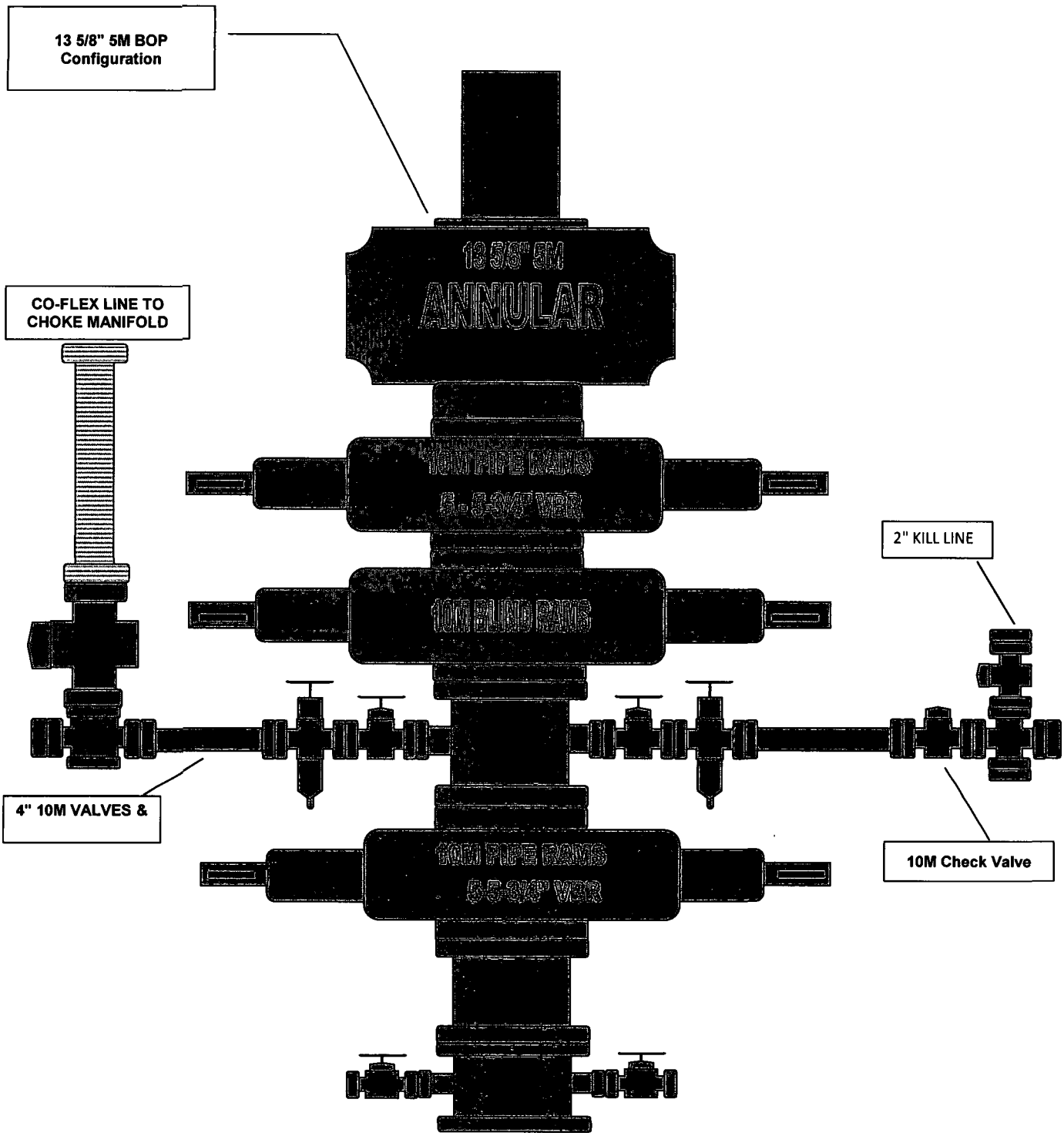
10M_Choke_Manifold_20181002125331.pdf

BOP Diagram Attachment:

5M_BOP_System_20180801083623.pdf

4String_MB_Ameredev_Drawing_net_REV_20180801083647.pdf

Pressure_Control_Plan_Pad_Well_MB4_Preset_BLM__002__20181002125437.pdf


13 5/8" 5M BOP Configuration
13 5/8" 5M
ANNULAR
CO-FLEX LINE TO CHOKE MANIFOLD
10M PIPE RAMS
5 - 5 3/4" VBR
2" KILL LINE
10M BLIND RAMS
4" 10M VALVES &
10M PIPE RAMS
5-5 3/4" VBR
10M Check Valve

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1191	0	1191	3014		1191	J-55	54.5	OTHER - BTC	1.83	0.9	DRY	14	DRY	13.5
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	5083	0	5083	3014		5083	HCL-80	40	OTHER - BTC	1.39	0.91	DRY	5.12	DRY	4.
3	INTERMEDIATE	8.75	7.625	NEW	API	N	0	11579	0	11579	3014		11579	HCP-110	29.7	OTHER - FJM	1.06	1.2	DRY	1.89	DRY	2.
4	PRODUCTION	6.75	5.5	NEW	API	N	0	22514	0	12150	3014		22514	P-110	20	OTHER - CYHP TMK-UP SF TORQ	1.7	1.82	DRY	2.7	DRY	3

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

GOLDEN_BELL_FED_COM_26_36_06_115H___CASING_DESIGN_CHECK_20180801083851.pdf

20180626_GOLDEN_BELL_FED_COM_26_36_06_115H_4_STRING_20180801083906.pdf

13.375_54.50_J55_SEAH_20181002130122.pdf

Casing Attachments

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

20180626_GOLDEN_BELL_FED_COM_26_36_06_115H_4_STRING_20180801083953.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___CASING_DESIGN_CHECK_20180801084005.pdf

9625_40_SeAH80HC_4100_Collapse_20181002130141.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

GOLDEN_BELL_FED_COM_26_36_06_115H___CASING_DESIGN_CHECK_20180801084118.pdf

20180626_GOLDEN_BELL_FED_COM_26_36_06_115H_4_STRING_20180801084129.pdf

7.625_29.70_P110HC_LIBERTY_FJM_20181002130217.pdf

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H

Casing Attachments

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

20180626_GOLDEN_BELL_FED_COM_26_36_06_115H_4_STRING_20180801084232.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___CASING_DESIGN_CHECK_20180801084242.pdf

TMK_UP_SF_TORQ____5.500in_x_20.00__P_110_CYHP_20181002130231.pdf

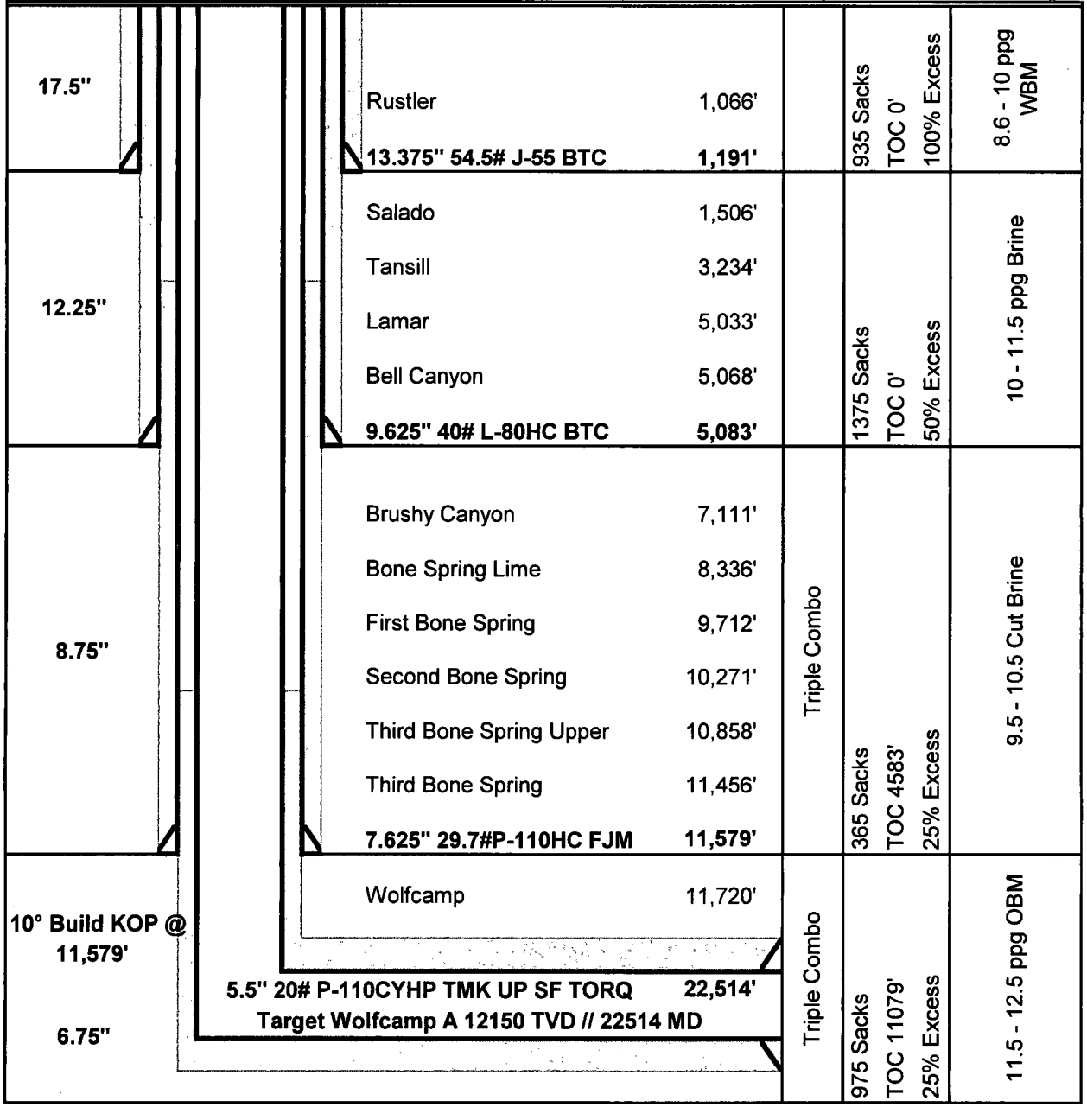
Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	807	735	1.89	12.9	1390.62	100	CLASS C	Bentonite, Retarder, Kolseal, Defoamer, Celloflake
SURFACE	Tail		807	1191	200	1.33	14.8	266.4	100	CLASS C	NONE
INTERMEDIATE	Lead		0	3484	1000	1.88	12.9	1878	50	CLASS C	Bentonite, Salt, Kolseal, Defoamer, Celloflake
INTERMEDIATE	Tail		3484	5083	375	1.33	14.8	500.25	25	CLASS C	NONE
INTERMEDIATE	Lead		4583	10347	265	2.85	11	753.93	25	CLASS H	Bentonite, Retarder, Kolseal, Defoamer, Celloflake, Anti-settling Expansion Additive
INTERMEDIATE	Tail		10347	11579	100	1.24	14.5	123.7	25	CLASS H	Bentonite, Retarder, Dispersant, Fluid Loss
PRODUCTION	Lead		11079	22514	975	1.22	14.5	1192.43	25	CLASS H	Retarder, Kolseal, Defoamer, Celloflake, Expansion Additive
PRODUCTION	Tail		22514	22514						CLASS H	none

AMEREDEV

Wellbore Schematic

Well:	Golden Bell Fed Com 26-36-06 115H	**Co. Well ID:**	xxxxx
SHL:	Sec. 31 25S-36E 200' FSL & 2350' FEL	**AFE No.:**	xxxx-xxx
BHL:	Sec. 7 26S-36E 200' FSL & 2318' FEL	**API No.:**	xxxxxxxxxx
	Lea, NM	**GL:**	3,014'
Wellhead:	A - 13-5/8" 5M x 13-5/8" SOW	**Field:**	Delaware_WCA
	B - 13-5/8" 5M x 13-5/8" 10M	**Objective:**	Wolfcamp A
	C - 13-5/8" 10M x 13-5/8" 10M	**TVD:**	12,150'
	Tubing Spool - 5-1/8" 15M x 13-3/8" 10M	**MD:**	22,514'
Xmas Tree:	2-9/16" 10M	**Rig:**	TBD
Tubing:	2-7/8" L-80 6.5# 8rd EUE	**E-Mail:**	Wellsite2@ameredev.com



Casing Design and Safety Factor Check

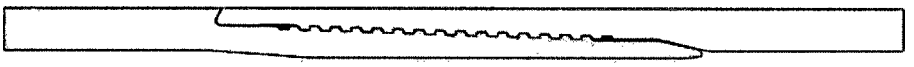
Casing Specifications						
Segment	**Hole ID**	**Depth**	**OD**	**Weight**	**Grade**	**Coupling**
Surface	17.5	1,191'	13.375	54.5	J-55	BTC
Int #1	12.25	5,083'	9.625	40	HCL-80	BTC
Int #2	8.75	11,579'	7.625	29.7	HCP-110	FJM
Prod Segment A	6.75	11,579'	5.5	20	CYHP-110	TMK UPSF
Prod Segment B	6.75	22,514'	5.5	20	CYHP-110	TMK UPSF

Check Surface Casing				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
14.38	853	909	1,130	2,730
Safety Factors				
1.56	13.15	14.00	1.83	0.90
Check Int #1 Casing				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
10.625	916	1042	4230	5750
Safety Factors				
0.81	4.51	5.12	1.39	0.91
Check Int #2 Casing				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
7.625	940	558	6700	9460
Safety Factors				
0.56	2.73	1.89	1.06	1.20
Check Prod Casing, Segment A				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
5.777	728	655	12780	14360
Safety Factors				
0.49	3.00	2.70	1.70	1.82
Check Prod Casing, Segment B				
OD Cplg	Body	Joint	Collapse	Burst
inches	*1000 lbs*	*1000 lbs*	*psi*	*psi*
5.777	728	655	12780	14360
Safety Factors				
0.49	63.75	57.36	1.62	1.82

U. S. Steel Tubular Products

6/6/2017 6:18:53 PM

7.625" 29.70lbs/ft (0.375" Wall) P110 HC USS-LIBERTY FJM®



MECHANICAL PROPERTIES	Pipe	USS-LIBERTY FJM®	
Minimum Yield Strength	110,000	--	psi
Maximum Yield Strength	140,000	--	psi
Minimum Tensile Strength	125,000	--	psi
DIMENSIONS	**Pipe**	**USS-LIBERTY FJM®**	
Outside Diameter	7.625	7.625	in.
Wall Thickness	0.375	--	in.
Inside Diameter	6.875	6.789	in.
Standard Drift	6.750	6.750	in.
Alternate Drift	--	--	in.
Nominal Linear Weight, T&C	29.70	--	lbs/ft
Plain End Weight	29.06	--	lbs/ft
SECTION AREA	**Pipe**	**USS-LIBERTY FJM®**	
Critical Area	8.541	5.074	sq. in.
Joint Efficiency	--	59.4	%
PERFORMANCE	**Pipe**	**USS-LIBERTY FJM®**	
Minimum Collapse Pressure	6,700	6,700	psi
Minimum Internal Yield Pressure	9,460	9,460	psi
Minimum Pipe Body Yield Strength	940,000	--	lbs
Joint Strength	--	558,000	lbs
Compression Rating	--	558,000	lbs
Reference Length	--	12,810	ft
Maximum Uniaxial Bend Rating	--	39.3	deg/100 ft
MAKE-UP DATA	**Pipe**	**USS-LIBERTY FJM®**	
Make-Up Loss	--	3.92	in.
Minimum Make-Up Torque	--	10,800	ft-lbs
Maximum Make-Up Torque	--	15,250	ft-lbs

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
2. Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
4. USS-LIBERTY FJM™ connections are optimized for each combination of OD and wall thickness and cannot be interchanged.
5. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
6. Reference length is calculated by joint strength divided by nominal plain end weight with 1.5 safety factor.
7. Connection external pressure leak resistance has been verified to 100% API pipe body collapse pressure following the guidelines of API 5C5 Cal III.

U. S. Steel Tubular Products
10343 Sam Houston Park Dr., #120
Houston, TX 77064

1-877-893-9461
connections@uss.com
www.usstubular.com

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H

Section 5 - Circulating Medium

Mud System Type: Semi-Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: All necessary supplies (e.g. bentonite, cedar bark) for fluid control will be on site.

Describe the mud monitoring system utilized: An electronic pit volume totalizer (PVT) will be utilized on the circulating system to monitor pit volume, flow rate, pump pressure, and pump rate.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1191	WATER-BASED MUD	8.6	10							
1191	5083	SALT SATURATED	10	11.5							
5083	11579	OTHER : CUT BRINE	9.5	10.5							
11579	12150	OIL-BASED MUD	11.5	12.5							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

A directional survey, measurement while drilling and a mudlog/geologic lithology log will all be run from surface to TD.

List of open and cased hole logs run in the well:

DS,MWD,MUDLOG

Coring operation description for the well:

No coring will be done on this well.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5000 **Anticipated Surface Pressure:** 2327

Anticipated Bottom Hole Temperature(F): 160

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Plan_20180801085013.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Golden_Bell_Fed_Com_26_36_06_115H_Plan_2_20180801085120.pdf

Pressure_Control_Plan_Pad_Well_MB4_Preset_BLM__002__20181002131229.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Other Variance attachment:

R616___CoC_for_hoses_12_18_17_20180801085206.pdf

Requested_Exceptions___4_String_Revised_09182018_20181002131246.pdf

SUPO

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Golden_Bell__6N_Wells_20180913124249.pdf
GOLDEN_BELL_FED_COM_26_36_06_115H___WELL_PAD_ACCESS_20180913124319.pdf

Existing Road Purpose: ACCESS **Row(s) Exist?** YES

ROW ID(s)

ID: NM-138148

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

GOLDEN_BELL_FED_COM_26_36_06_115H___WELL_PAD_ACCESS_20180913124523.pdf
Golden_Bell__6N_Wells_20180913124546.pdf

New road type: RESOURCE

Length: 3801 Feet **Width (ft.):** 30

Max slope (%): 2 **Max grade (%):** 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Crowned and Ditched

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: CALICHE

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: GRADER

Access other construction information: NM One Call (811) will be notified before construction start.

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: Crowned and Ditched

Road Drainage Control Structures (DCS) description: None

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

GOLDEN_BELL_FED_COM_26_36_06_115H___1_MILE_RADIUS_WELLS_20180801090116.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: A multiple well pad will be located on section 31, and will measure 400'x500'. The top 6" of soil and brush will be stockpiled north of the well pad. A 4" Poly Flowline will be buried and run approximately 1,305' (805' Needing ROW) from the Golden Bell 26 36 06 115H to the Golden Bell CTB that will be north of the well pad. A 20' pipeline ROW containing three 12" poly water lines and one 8" steel crude line will be run from the Golden Bell CTB to the right of way (NM-138148) approved pipeline corridor. The new lines will be 1,380'. A power line will be run parallel to the pipeline corridor and connect to a power line that will be built in an existing approved right of way (NM-138148). The power line will be approximately 1,360'. The Golden Bell CTB will be 500'x525' and will include a separator, Heat Exchanger, VRU, VRT, meter run and a tank battery. The new production facility will have a secondary containment structure that is constructed to hold the capacity of 1-1/2 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary. Because this facility goes off lease on BLM owned surface, the pipeline, road, electric corridors, and the Golden Bell CTB will need ROW from the BLM.

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H

Production Facilities map:

Golden_Bell__6N_Wells_20180913124734.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___WELL___FACILITIES_MAP_20180913124756.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: DUST CONTROL, INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING

Water source type: GW WELL

Describe type:

Source longitude:

Source latitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 20000

Source volume (acre-feet): 2.577862

Source volume (gal): 840000

Water source and transportation map:

GOLDEN_BELL_FED_COM_26_36_06_115H___WATER_MAP_20180913124919.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___WATER_WELLS_LIST_20180913124922.pdf

Water source comments: Water will be trucked or surface piped from existing water wells on private land. See attached list of available wells.

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: NM One Call (811) will be notified before construction start. Top 6" of soil and brush will be stockpiled north of the pad. V-door will face east. Closed loop drilling system will be used. Caliche will be hauled from an existing caliche pits on private and state land.

Construction Materials source location attachment:

GOLDEN_BELL_FED_COM_26_36_06_115H___WELL_SITE_DIAGRAM_20180913125034.pdf

GOLDEN_BELL_FED_COM_26_36_06_115H___CALICHE_MAP_20180913125031.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill cuttings, mud, salts, and other chemicals

Amount of waste: 2000 barrels

Waste disposal frequency : Daily

Safe containment description: Steel tanks on pad

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY

Disposal location ownership: PRIVATE

Disposal type description:

Disposal location description: R360's State approved (NM-01-0006) disposal site at Halfway, NM

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Steel tanks on pad

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

GOLDEN_BELL_FED_COM_26_36_06_115H___WELL_SITE_DIAGRAM_20180913125229.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: GOLDEN BELL

Multiple Well Pad Number: 115H

Recontouring attachment:

GOLDEN_BELL_FED_COM_26_36_06_115H___WELL_SITE_DIAGRAM_20180913125250.pdf

Drainage/Erosion control construction: Crowned and ditched

Drainage/Erosion control reclamation: Harrowed on the contour

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H

Well pad proposed disturbance (acres): 4.59
Road proposed disturbance (acres): 2.62
Powerline proposed disturbance (acres): 0.63
Pipeline proposed disturbance (acres): 0.63
Other proposed disturbance (acres): 6.03
Total proposed disturbance: 14.5

Well pad interim reclamation (acres): 0.79
Road interim reclamation (acres): 0
Powerline interim reclamation (acres): 0
Pipeline interim reclamation (acres): 0
Other interim reclamation (acres): 0
Total interim reclamation: 0.79

Well pad long term disturbance (acres): 3.8
Road long term disturbance (acres): 2.62
Powerline long term disturbance (acres): 0.63
Pipeline long term disturbance (acres): 0.63
Other long term disturbance (acres): 6.03
Total long term disturbance: 13.71

Disturbance Comments:

Reconstruction method: Interim reclamation will be completed within 6 months of completing the well. Interim reclamation will consist of shrinking the pad 17% (.79 acre) by removing caliche and reclaiming 40' wide swaths on the North and East sides of the pad. This will leave 3.8 acres for producing three wells, with tractor-trailer turn around. Disturbed areas will be contoured to match pre-construction grades. Soil and brush will be evenly spread over disturbed areas and harrowed on the contour. Disturbed areas will be seeded in accordance with the surface owner's requirements.
Topsoil redistribution: Enough stockpiled topsoil will be retained to cover the remainder of the pad when the well is plugged. New road will be similarly reclaimed within 6 months of plugging. Noxious weeds will be controlled.
Soil treatment: None

Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name:

Last Name:

Phone:

Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: To BLM standards

Weed treatment plan attachment:

Monitoring plan description: To BLM standards

Monitoring plan attachment:

Success standards: To BLM satisfaction

Pit closure description: No pit

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Disturbance type: PIPELINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDENBELL FED COM [redacted] **Well Number:** 115H

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Disturbance type: OTHER

Describe: POWERLINE

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 **Well Number:** 115H

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other Information

Right of Way needed? YES **Use APD as ROW?** YES

ROW Type(s): 281001 ROW - ROADS,285003 ROW – POWER TRANS,288100 ROW – O&G Pipeline,288103 ROW – Salt Water Disposal Pipeline/Facility,289001 ROW- O&G Well Pad

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: On-site inspection was held with Jeff Robertson (BLM) on 5/23/18. Ameredev made a donation with the MOU fund in lieu of an archaeology report.

Other SUPO Attachment

GOLDEN_BELL_FED_COM_26_36_06_115H___SURFACE_USE_PLAN_20180913125809.pdf

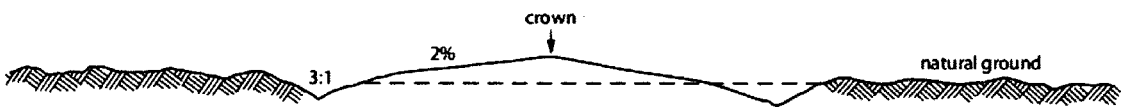
PWD

Section 1 – Existing Roads

A. The existing access road route to the proposed project is depicted on *Exhibit 1 – Well Pad Access*. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of this surface use plan.
B. Right-Of-Way will be acquired before construction begins.
C. The operator will improve or maintain existing roads in a condition the same as or better than before operations begin. The operator will repair pot holes, clear ditches, repair the crown, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.
D. Operator will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.

Section 2 – New or Reconstructed Access Roads

A. A section of new access road will be needed for this proposed project. See *Exhibit 1 – Well Pad Access*, for locations.
B. The length of new access road needed to be constructed for this proposed project is approximately 3,801 feet.
C. New access road will be constructed with 6 inches of compacted caliche.
D. The maximum driving width of the access road will be 20 feet. The maximum width of surface disturbance when constructing the access road will not exceed 30 feet. All areas outside of the driving surface will be revegetated.
E. When the road travels on fairly level ground, the road will be crowned and ditched with a maximum 2% slope from the tip of the road crown to the edge of the driving surface. Ditches will be constructed on each side of the road. The ditches will be 3 feet wide with 3:1 slopes. See road cross section diagram below:



F. No turnouts will be constructed on the new portions of access road.
G. No cattle guards will be installed on the new portions of access road.
H. Right-Of-Way will be acquired before construction begins.
I. No culverts or low water crossings will be constructed for the new portions of access road.

J. Since the access road is on level ground, no lead-off ditches will be constructed for the new portions of access road.
K. Any sharp turns in the in the new road will be rounded to facilitate turning by trucks.
L. Newly constructed or reconstructed roads, on surface under the jurisdiction of the Bureau of Land Management, will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well-constructed and safe road.
M. All topsoil and fragmented rock removed in excavation will be used as directed in approved plan.

Section 3 – Location of Existing Wells

Exhibit 2 – One Mile Radius Existing Wells depicts all known wells within a one mile radius of the Golden Bell Fed Com 26 36 06 115H. See *Exhibit 2a – One Mile Radius Wells List* for a list of wells depicted.

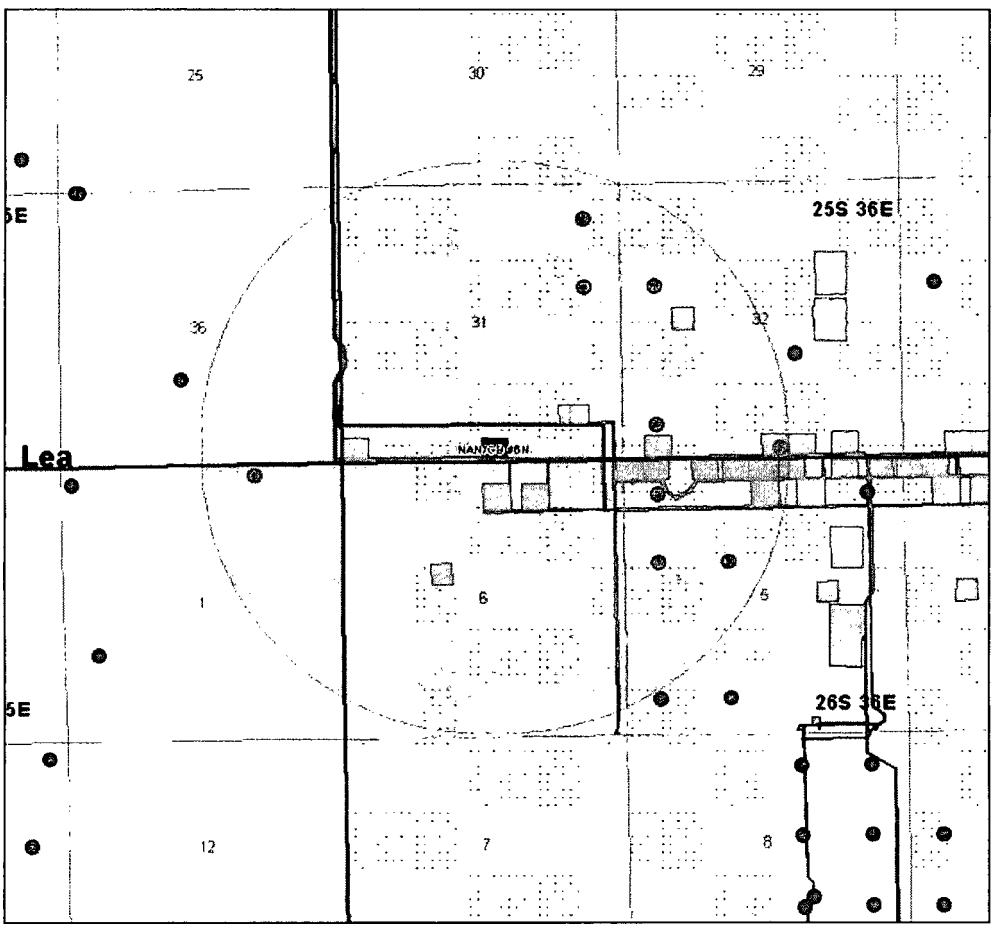


Exhibit 2 – One Mile Radius Existing Wells

API	WELL NAME	STATUS	TD
30025260090000	STANDING BEAR 1	PLUGOIL	3280
30025260100000	SPOTTED TAIL FED 1	OIL	3336
30025260170000	SITTING BULL 1	OIL	3379
30025260270000	SITTING BULL 1	OIL	3368
30025268760000	STANDING BEAR FED 2	PLUGOIL	3311
30025259400000	BUSSELL FEDERAL 1	ABDNLOC	
30025261530000	SPOTTED TAIL FED 2	ABDNLOC	
30025444700000	REDBUD 25-36-32 STAT 105H	PERMIT	
30025444710000	REDBUD 25-36-32 STAT 115H	PERMIT	
30025444710100	REDBUD 25-36-32 STAT 115H	PERMIT	
30025445050000	USHANKA FEDERAL COM 023H	AT-TD	12500
30025445050100	USHANKA FEDERAL COM 023H	PERMIT	

Exhibit 2a – One Mile Radius Existing Wells List

Section 4 - Location of Existing and/or Proposed Production Facilities

A. The multiple well pad will be located on Section 31, and will measure 400'x500'. The top 6" of soil and brush will be stockpiled north of the well pad. Should any type of production facilities be located on the well pad, they will be strategically placed to allow for maximum interim reclamation, re-contouring, and revegetation of the well location.

B. Production from the proposed well will be transported to a new production facility named Golden Bell CTB, north of the well pad.

C. A 4" Poly Flowline will be buried and run approximately 1,305' (805' Needing ROW) from the Golden Bell 26 36 06 115H to the Golden Bell CTB that will be north of the well pad. A 20' pipeline ROW containing three 12" poly water lines and one 8" steel crude line will be run from the Golden Bell CTB to the right of way (NM-138148) approved pipeline corridor. The new lines will be 1,380'. A power line will be run parallel to the pipeline corridor and connect to a power line that will be built in an existing approved right of way (NM-138148). The power line will be approximately 1,360'. The Golden Bell CTB will be 500'x525' and will include a separator, Heat Exchanger, VRU, VRT, meter run and a tank battery. The new production facility will have a secondary containment structure that is constructed to hold the capacity of 1-1/2 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary. Because this facility goes off lease on BLM owned surface, the pipeline, road, electric corridors, and the Golden Bell CTB will need ROW from the BLM.

D. All permanent (lasting more than six months) above ground structures including but not limited to pump jacks, storage tanks, barrels, pipeline risers, meter housing, etc., that are not subject to safety requirements will be painted a non-reflective paint color, Shale Green, from the BLM

Standard Environmental Colors chart, unless another color is required in the APD Conditions of Approval.

E. If any plans change regarding the production facility or other infrastructure (pipeline, electrical lines, etc.), Ameredev will submit a sundry notice or right-of-way (if applicable) prior to installation or construction.

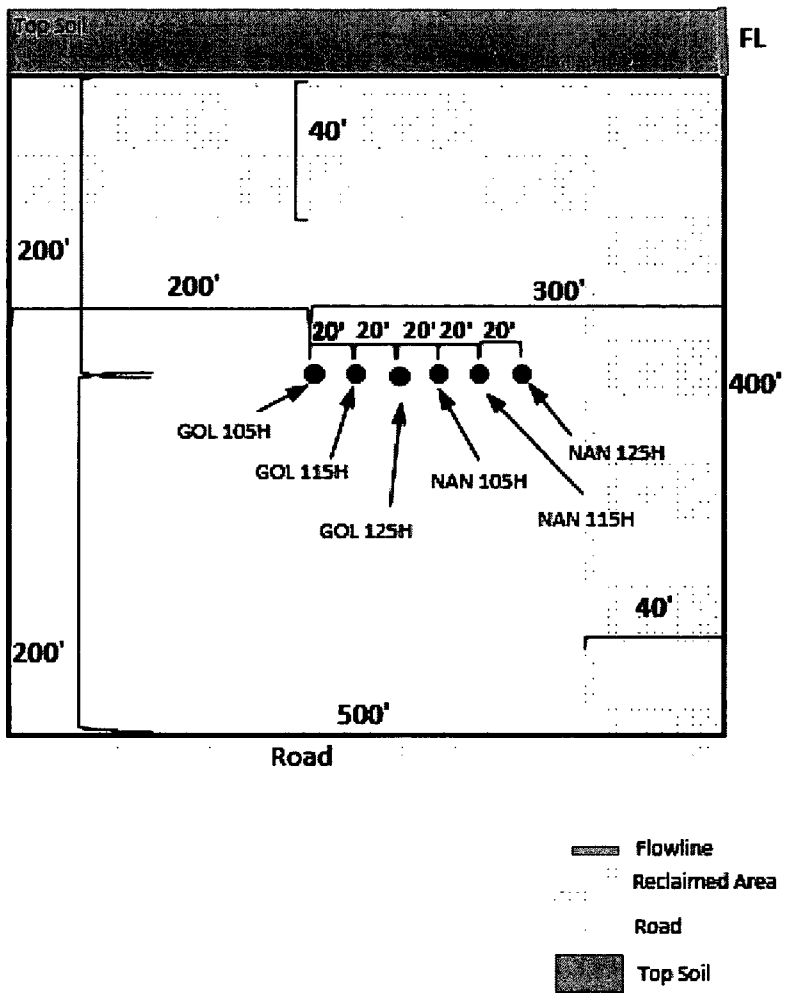


Exhibit 3 – Well Site Diagram

Section 5 - Location and Types of Water Supply

A. This location will be drilled using a combination of water and mud systems (outlined in the Drilling Program). The water will be obtained from preexisting water wells, by running a pump directly to the drilling rig. See *Exhibit 4 - Water Wells*, for a list of available water wells. In cases where a polyline is used to transport water for drilling or completion purposes, the existing and proposed roads into location will be utilized.

Permit #	Well Name	Location (Lat/Lon)
CP 1049 POD 2	Bennett	32°04'14.32" N, 103°12'32.30" W
CP 1378	S. Eppenour	32°05'40.62" N, 103°13' 35.26" W
CP 1285	Sec. 5	32°03'56.50" N, 103°17'37.04" W
CP 857	Capped	32°04'39.70" N, 103°16'51.13" W
C 2287	#1	32°03'59.0" N, 103°33'16.8" W
C 2286	#2	32°03'59.2" N, 103°33'15.2" W
C 2290	#3	32°04'1.0" N, 103°33' 12.6" W
C 2285	#4	32°04'3.7" N, 103°33'9.7" W
C 2288	#5	32°04'0.5" N, 103°33'8.4" W
C 2294	Garden	32°03'3.2" N, 103°32'38.1" W
C 2293	House	32°03'2.3" N, 103°32'36.8" W
J-11-S-3	Farm Well #2	32°03'08.4" N, 103°16'35.2" W
J-11-S-2	Farm Well #3	32°03'11.5" N, 103°17'02.0" W
J-11-S	Farm Well #4	32°03'24.6" N, 103°17'02.1" W
CP 1170 POD 1	CB 1	32°03'57.2" N, 103°18'45.3" W
CP 1170 POD 5		32°07'17.1" N, 103°17'48.0" W
CP 1263 POD 5	CB 2	32°03'56.27" N, 103°18'27.4" W
CP 1263 POD 3	CB 3	32°03'54.90" N, 103°18'16.74" W
CP 1351 POD 1	CB 4	32°03'57.16" N, 103°17'45.13" W
CP 1351 POD 2	CB 5	32°03'30.70" N, 103°17'45.70" W
J 26	Ryan	32°01'20.41" N, 103°15'49.46" W
J 3		32°02'41.5" N, 103°18'55.8" W

Exhibit 4 – Water Wells

Section 6 – Construction/Construction Materials

A. Caliche will be obtained from the caliche pit located at Lat: 32° 6'28.78"N, Long: 103°16'58.77"Wor the caliche pit at Lat: 32° 6'33.14"N, Long: 103°18'44.16"Wor the caliche pit at Lat: 32° 3'8.30"N, Long: 103°13'57.00"W.

B. Caliche utilized for the drilling pad will be obtained either from the locations listed above, an existing approved mineral pit, or by benching into a hill, which will allow the pad to be level with existing caliche from the cut, or extracted by "flipping" the well location. A mineral material permit will be obtained from the BLM prior to excavating any caliche on Federal Lands. Amount will vary for each pad. The procedure for "flipping" a well location is as follows:

1. An adequate amount of topsoil/root zone (usually top 6 inches of soil) will be stripped from the proposed well location and stockpiled along the side of the well location as depicted on the *Exhibit 3 - Well Site Diagram*.
2. An area will be used within the proposed well site dimensions to excavate caliche.
3. Subsoil will be removed and stockpiled within the surveyed well pad dimensions.
4. Once caliche/surfacing mineral is found, the mineral material will be excavated and stock piled within the approved drilling pad dimensions.
5. Subsoil will then be pushed back in the excavated hole and caliche will be spread accordingly across the entire well pad and road (if available).
6. Neither caliche, nor subsoil will be stockpiled outside of the well pad dimensions. Topsoil will be stockpiled along the edge of the pad as depicted in *Exhibit 5 – Enlarged Well Site Diagram.*
7. In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit or other established mineral pit. A BLM mineral material permit will be acquired prior to obtaining any mineral material from BLM pits or federal land.

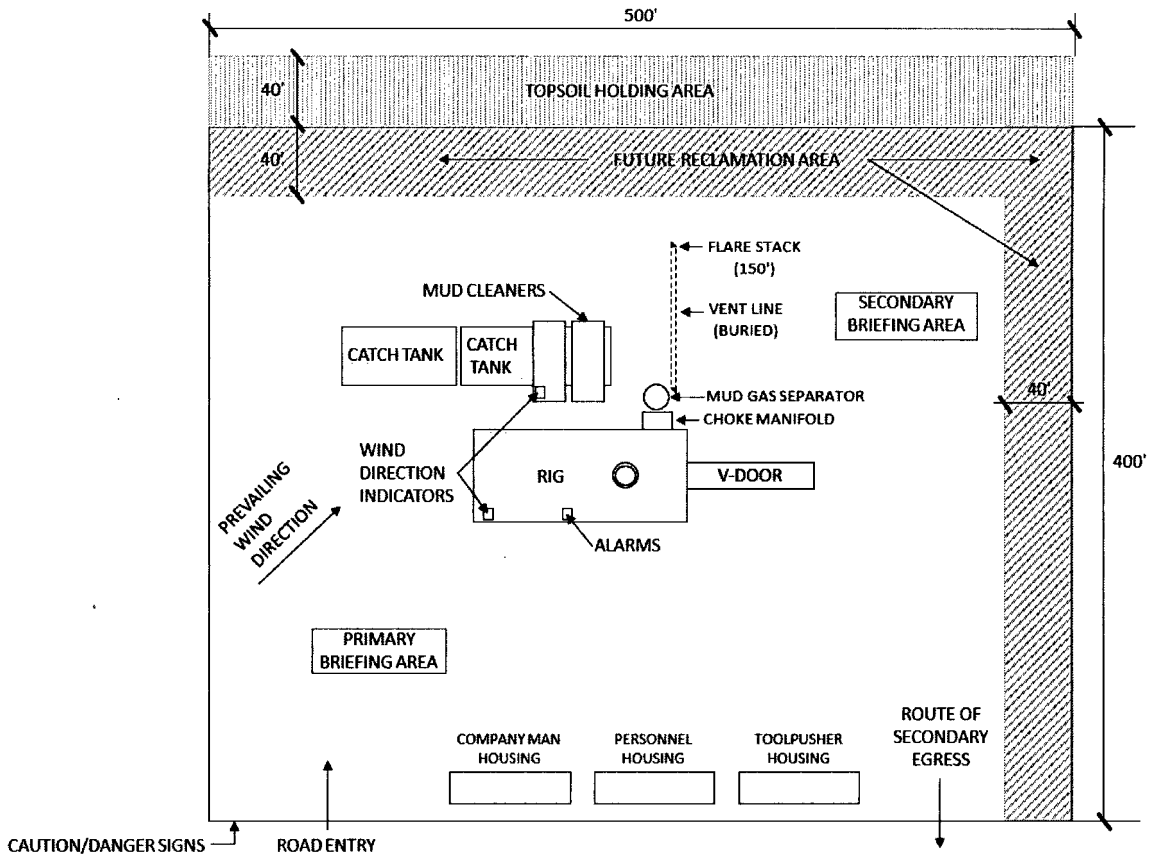


Exhibit 5 – Enlarged Well Site Diagram

Section 7 - Methods of Handling Waste

A. Drill cuttings, mud, salts and other chemicals will be properly disposed of into steel tanks on site and hauled to a State approved commercial disposal facility.

B. Garbage and trash produced during drilling and completion operations will be collected in a portable metal trash container and disposed of properly at a state approved disposal facility. All trash on and around the well site will be collected for disposal.

C. Human waste and grey water will be properly contained and disposed of properly at a state approved disposal facility.

D. After drilling and completion operations, trash, chemicals, salts, frac sand and other waste material will be removed and disposed of properly at a state approved disposal facility.

Section 8 - Ancillary Facilities

A. No ancillary facilities will be needed for the proposed project.

Section 9 - Well Site Layout

A. See *Exhibit 3 - Well Site Diagram* and *Exhibit 5 – Enlarged Well Site Diagram.* The following information is presented:
1. Reasonable scale
2. Well pad dimensions/orientation
3. Drilling rig components/layout
4. Proposed access road
5. Topsoil stockpile

B. The proposed drilling pad was staked and surveyed by a professional surveyor. The attached survey plat of the well site depicts the drilling pad layout as staked.

C. Topsoil salvaging
1. Grass, forbs, and small woody vegetation such as mesquite will be excavated as the topsoil is removed. Large woody vegetation will be stripped and stored separately and re-spread evenly on the site following topsoil re-spreading. Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top 6 inches of soil material will be stripped and stockpiled on the perimeter of the well location and along the perimeter of the access road to control run-on and run-off, to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

Section 10 - Plans for Final Surface Reclamation

Reclamation Objectives

A. The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil, to control erosion, and to minimize habitat and forage loss, visual impact, and weed infestation during the life of the well or facilities.

B. The long-term objective of final reclamation is to return the land to a condition similar to what existed prior to disturbance. This includes restoration of the landform and natural vegetative community, hydrologic systems, visual resources, and wildlife habitats. To ensure that the long-term objective will be reached through human and natural processes, actions will be taken to ensure standards are met for site stability, visual quality, hydrological functioning, and vegetative productivity.

C. The BLM will be notified at least 3 days prior to the commencement of any reclamation procedures.

D. If circumstances allow, interim reclamation and/or final reclamation actions will be completed no later than 6 months from when the final well on location has been completed or plugged. Ameredev will gain written permission from the BLM if more time is needed.
E. Interim reclamation will be performed on the well site after the well is drilled and completed. *Exhibit 3 – Well Site Diagram* and *Exhibit 5 – Enlarged Well Site Diagram* depict the location and dimension of the planned interim reclamation for the well site.

Interim Reclamation Procedures (if performed)

A. Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production.
B. In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
C. The areas planned for interim reclamation will then be contoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 Ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be re-contoured to the above ratios during interim reclamation.
D. Topsoil will be evenly re-spread and aggressively revegetated over the entire disturbed area not needed for all-weather operations, including cuts and fills. To seed the area, the proper BLM mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting, in order to break the soil crust and create seed germination micro-sites.
E. Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.
F. The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

Final Reclamation Procedures (well pad, buried pipelines, etc.)

A. Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment.
B. All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
C. All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be re-contoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to re-contouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.
D. After all the disturbed areas have been properly prepared, the areas will be seeded with the proper BLM seed mixture, free of noxious weeds. Final seedbed preparation will consist of

contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting, in order to break the soil crust and create seed germination micro-sites.

E. Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

F. All unused equipment and structures including pipelines, electric line poles, tanks, etc. that serviced the well will be removed.

G. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not re-disturbed, and that erosion is controlled.

Section 11 - Surface Ownership

A. BLM has surface ownership for proposed project area.

Section 12 - Other Information

A. There are no dwellings within 1 mile of this location.

B. An on-site meeting for Ameredev's Golden Bell Fed Com 26 36 06 115H well was held on May 23, 2018.

C. The well pad described in this document - Nandina/Golden Bell (NAN_GB #6N) - will contain 6 wells that produce into two central tank batteries (CTBs) located north of the well pad. The wells share a common pad access road, and the six flowlines from the individual wells will share a common corridor that will terminate into the appropriate CTB. Both CTBs will be tied into the same pipeline and electrical corridor. The wells that share the pad are:

- Nandina Fed Com 25 36 31 125H, APD ID# 10400031760
- Nandina Fed Com 25 36 31 115H, APD ID# 10400031906
- Nandina Fed Com 25 36 31 105H, APD ID# 10400031932
- Golden Bell Fed Com 26 36 06 125H, APD ID# 10400032278
- Golden Bell Fed Com 26 36 06 115H, APD ID# 10400032648
- Golden Bell Fed Com 26 36 06 105H, APD ID# 10400032663

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Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Other PWD type description:

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 **Well Number:** 115H

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

Bond Info

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001478

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

Operator Certification

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Christie Hanna **Signed on:** 10/02/2018

Title: Senior Engineering Technician

Street Address: 5707 Southwest Parkway, Building 1, Suite 275

City: Austin **State:** TX **Zip:** 78735

Phone: (737)300-4723

Email address: channa@ameredev.com

Operator Name: AMEREDEV OPERATING LLC

Well Name: GOLDEN BELL FED COM 26 36 06 [redacted] **Well Number:** 115H

Field Representative

Representative Name: ZACHARY BOYD

Street Address: 5707 SOUTHWEST PARKWAY, BLDG 1, STE. 275

City: AUSTIN **State:** TX **Zip:** 78735

Phone: (737)300-4700

Email address: zboyd@ameredev.com

Payment Info

Payment

APD Fee Payment Method: PAY.GOV

pay.gov Tracking ID: 26BB0DDB