Form 3160-3 (June 2015)		FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018						
UNITED STATE DEPARTMENT OF THE I BUREAU OF LAND MAN	INTERIOR	5. Lease Serial No.						
APPLICATION FOR PERMIT TO D	6. If Indian, Allotee or Tribe Name							
	REENTER	7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.						
1c. Type of Completion: Hydraulic Fracturing S	Single Zone Multiple Zone	[318012]						
2. Name of Operator [3	72165]	9. API Well No. 30-025-50270						
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory [96434] XXXXXXXXXXXXXX						
4. Location of Well (Report location clearly and in accordance At surface At surface At surface	with any State requirements.*)	11. Sec., T. R. M. or Blk. and Survey or Area						
At proposed prod. zone 14. Distance in miles and direction from nearest town or post of	fice*	12. County or Parish 13. State						
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease 17. Spa	ing Unit dedicated to this well						
 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 	19. Proposed Depth 20. BLN	//BIA Bond No. in file						
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration						
	24. Attachments							
The following, completed in accordance with the requirements of (as applicable)	of Onshore Oil and Gas Order No. 1, and the	Hydraulic Fracturing rule per 43 CFR 3162.3-3						
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syste SUPO must be filed with the appropriate Forest Service Office 	Item 20 above).em Lands, the5. Operator certification.	ons unless covered by an existing bond on file (see						
25. Signature	Name (Printed/Typed)	Date						
Title								
Approved by (Signature)	Name (Printed/Typed)	Date						
Title	Office							
Application approval does not warrant or certify that the applicat applicant to conduct operations thereon. Conditions of approval, if any, are attached.	ant holds legal or equitable title to those right	s in the subject lease which would entitle the						
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, 1 of the United States any false, fictitious or fraudulent statements	make it a crime for any person knowingly ar s or representations as to any matter within it	d willfully to make to any department or agency s jurisdiction.						
NGMP Rec 06/23/2022	VED WITH CONDITIONS	KZ 06/23/2022						
SL (Continued on page 2)	VED WITH COM	*(Instructions on page 2)						

Approval Date: 03/07/2022

.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Centennial Resources
LEASE NO.:	NMNM77090
LOCATION:	Section 27, T.24 S., R.34 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	Juliet Fed Com 114H
SURFACE HOLE FOOTAGE:	1889'/N & 2146'/W
BOTTOM HOLE FOOTAGE	100'/N & 2310'/W

COA

H2S	C Yes	💽 No	
Potash	None	C Secretary	C R-111-P
Cave/Karst Potential	• Low	C Medium	C High
Cave/Karst Potential	Critical		
Variance	C None	• Flex Hose	C Other
Wellhead	Conventional	Multibowl	C Both
Other	□4 String Area	Capitan Reef	□ WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	□ Water Disposal	COM	🗖 Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The **13-3/8** inch surface casing shall be set at approximately **1130** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of $\underline{8}$ <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept 1/3rd fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

• Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the tail cement slurry due to cave/karst or potash.

- 3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000** (**5M**) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.

- Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
- BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24 hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

Page 4 of 7

- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - e. The results of the test shall be reported to the appropriate BLM office.

- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

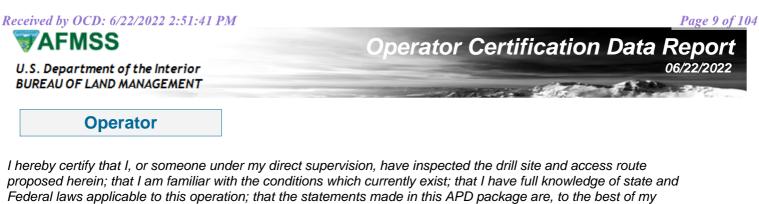
Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations. **ZS020722**

Approval Date: 03/07/2022



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:		Signed on: 12/16/2020
Title:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		
Field		
Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

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WAFMSS

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

BUREAU OF LAND MANAGEME

Submission Date: 12/17/2020

Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM

Well Type: OIL WELL

APD ID: 10400066751

Well Number: 114H Well Work Type: Drill Highlighted data reflects the most recent changes <u>Show Final Text</u>

Application Data

Section 1 - General

APD ID: 10400066751	Tie to previous NOS? N	Submission Date: 12/17/2020
BLM Office: Carlsbad	User: KANICIA SCHLICHTING	Title: Sr. Regulatory Analyst
Federal/Indian APD: FED	Is the first lease penetrated for p	roduction Federal or Indian? FED
Lease number: NMNM77090	Lease Acres:	
Surface access agreement in place?	Allotted? Reser	vation:
Agreement in place? NO	Federal or Indian agreement:	
Agreement number:		
Agreement name:		
Keep application confidential? Y		
Permitting Agent? NO	APD Operator: CENTENNIAL RE	SOURCE PRODUCTION LLC
Operator letter of		

Operator Info

Operator Organization Name: CENTENNIAL RESOURCE PRODUCTION LLC
Operator Address: 1001 17TH STREET, SUITE 1800
Operator PO Box:
Operator PO Box:
Operator City: DENVER State: CO
Operator Phone: (720)499-1400

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO	Master Development Plan name:							
Well in Master SUPO? NO	Master SUPO name:							
Well in Master Drilling Plan? NO	Master Drilling Plan name:							
Well Name: JULIET FEDERAL COM	Well Number: 114H	Well API Number:						
Field/Pool or Exploratory? Field and Pool	Field Name: AVALON A Pool Name: OJO BONE SPRING							

06/22/2022

Deter 10/47/0000

Well Number: 114H

Well Name: JULIET FEDERAL COM

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Is the propo	sed well in a Helium production a	rea? N	Use Existing Well Pad?	Use Existing Well Pad? N New						
Type of Well	Pad: MULTIPLE WELL		Multiple Well Pad Name	e:	Number: 1					
Well Class:	HORIZONTAL		Number of Legs: 1							
Well Work T	ype: Drill									
Well Type: C	DIL WELL									
Describe We	ell Type:									
Well sub-Ty	pe: INFILL									
Describe sul	b-type:									
Distance to	town: 20 Miles Distan	ce to ne	arest well: 30 FT	Distanc	e to lease line: 1889 FT					
Reservoir w	ell spacing assigned acres Measu	irement:	240 Acres							
Well plat:	Juliet_Fed_Com_114H_lease_C10	02_2020 ⁻	1216122036.pdf							
	Juliet_Fed_Com_114H_C102_202	20121612	22038.pdf							
Well work st	art Date: 11/26/2022		Duration: 45 DAYS							

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number: 23782

Vertical Datum: NAVD88

Reference Datum: GROUND LEVEL

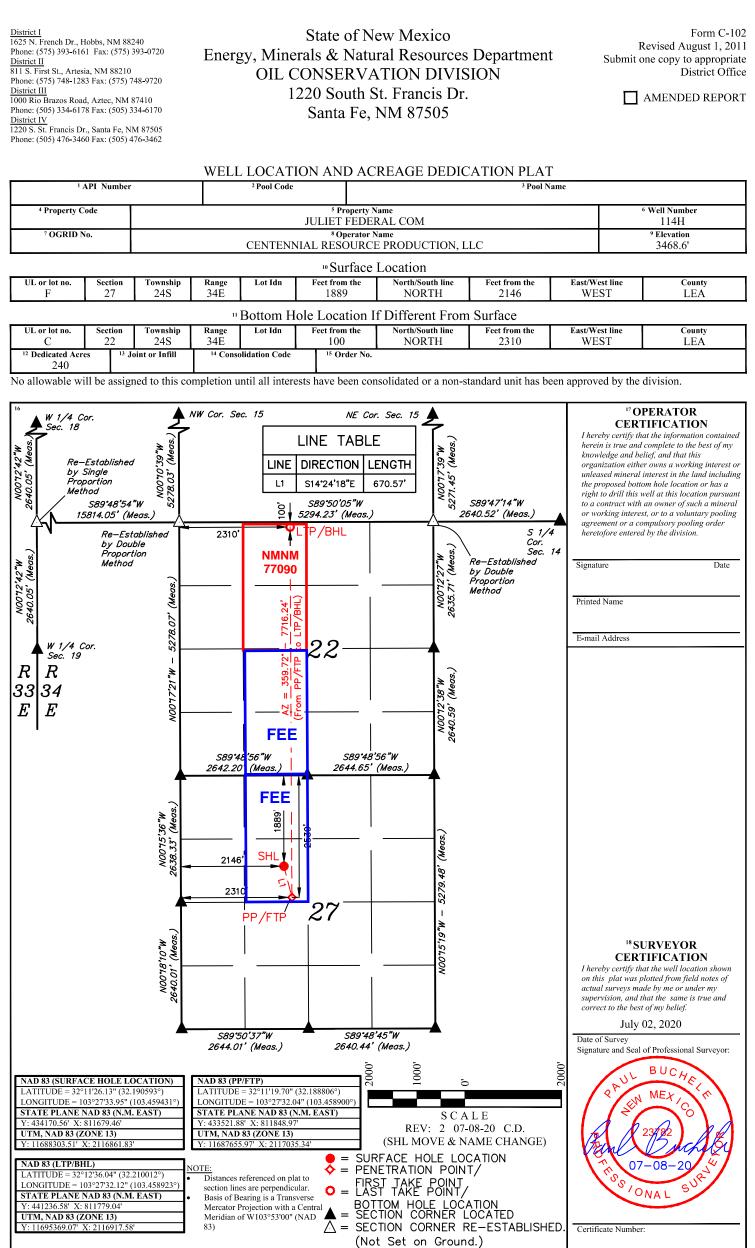
Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	ТИД	Will this well produce from this
SHL Leg #1	188 9	FNL	214 6	FW L	24S	34E	27	Aliquot SENW	32.19059 3	- 103.4594 31	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	346 8	0	0	Y
KOP Leg #1	188 9	FNL	214 6	FW L	24S	34E	27	Aliquot SENW	32.19059 3	- 103.4594 31	LEA	NEW MEXI CO		F	FEE	- 548 8	899 5	895 6	Y

Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM

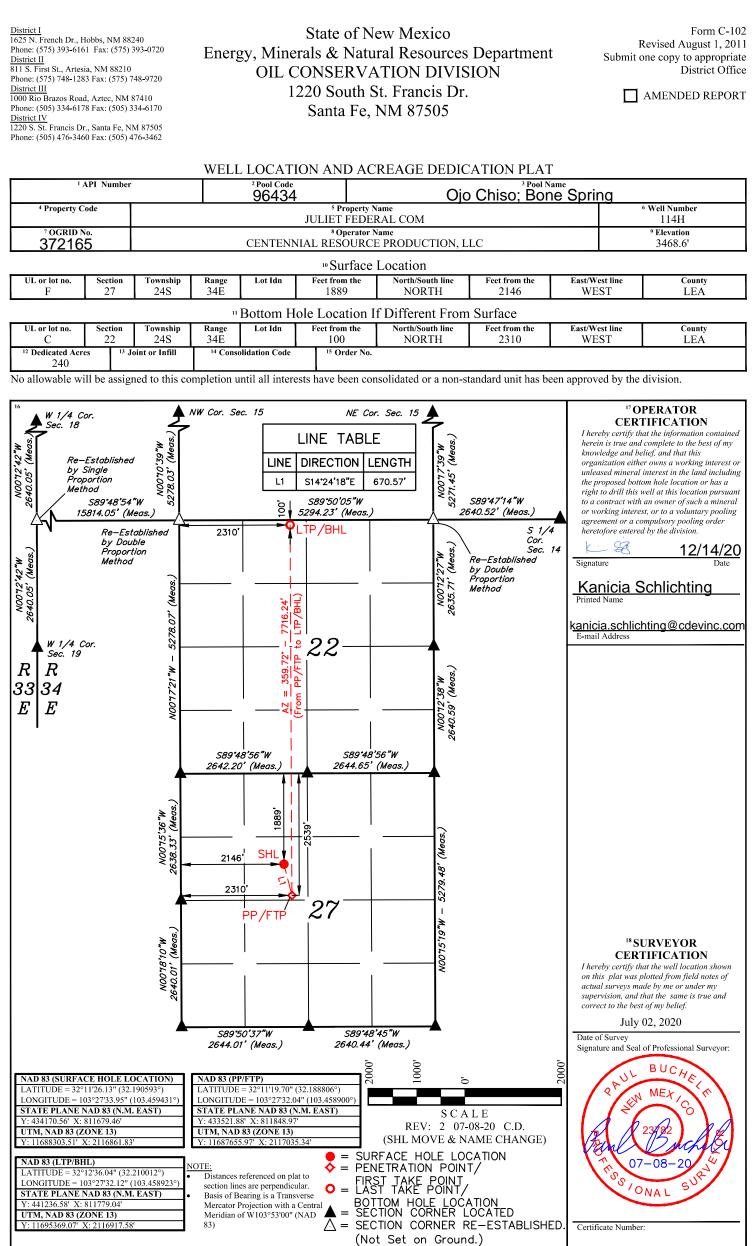
Well Number: 114H

Wellbore	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	Will this well produce from this
PPP	253	FNL	231	FW	24S	34E	27	Aliquot	32.18880		LEA	1		F	FEE	-	989	952	Y
Leg	9		0	L				SENW	6	103.4589			MEXI			606	5	9	
#1-1												со	со			1			
EXIT	100	FNL	231	FW	24S	34E	22	Aliquot	32.21001	-	LEA	NEW	NEW	F	NMNM	-	170	952	Y
Leg			0	L				NENW	2	103.4589			MEXI		77090	606	42	9	
#1										23		со	со			1			
BHL	100	FNL	231	FW	24S	34E	22	Aliquot	32.21001	-	LEA			F	NMNM	-	170	952	Y
Leg			0	L				NENW	2	103.4589			MEXI		77090	606	42	9	
#1										23		co	со			1			



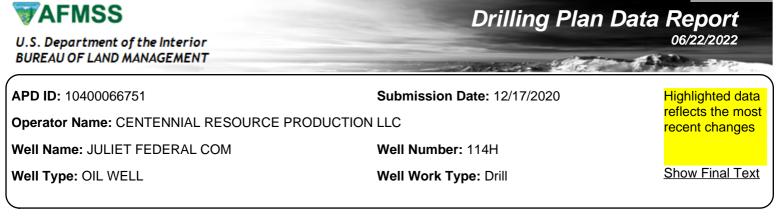
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Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
1235228	RUSTLER	3468	1082	1082	SANDSTONE	NONE	Ν
1235229	SALADO	1767	1701	1701	ANHYDRITE, SALT	USEABLE WATER	N
1235230	LAMAR	-1894	5362	5362	SHALE	USEABLE WATER	N
1235231	BELL CANYON	-1966	5434	5434	SANDSTONE	NATURAL GAS, OIL	N
1235232	CHERRY CANYON	-2866	6334	6334	SANDSTONE	NATURAL GAS, OIL	N
1235233	BRUSHY CANYON	-4421	7889	7889	SANDSTONE	NATURAL GAS, OIL	N
1235234	BONE SPRING LIME	-5811	9279	9279	OTHER : Carbonate	NATURAL GAS, OIL	Ν
1235235	AVALON SAND	-5832	9300	9300	SHALE	CO2, NATURAL GAS, OIL	Y
1235236	FIRST BONE SPRING SAND	-6774	10242	10242	SANDSTONE	NATURAL GAS, OIL	N
1235237	BONE SPRING 2ND	-6975	10443	10443	SHALE	NATURAL GAS, OIL	Ν
1235238	BONE SPRING 3RD	-7801	11269	11269	SANDSTONE	NATURAL GAS, OIL	Ν

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 9529

Equipment: The BOP and related equipment will meet or exceed the requirements of a 5M-psi system as set forth in On Shore Order No. 2. See attached BOP Schematic. A. Casinghead: 13 5/8 5,000 psi SOW x 13 5,000 psi WP Intermediate Spool: 13 5,000 psi WP x 11 5,000 psi WP Tubinghead: 11 5,000 psi WP x 7 1/16" 15,000 psi WP B. Minimum Specified Pressure Control Equipment Annular preventer One Pipe ram, One blind ram Drilling spool, or blowout preventer with 2 side outlets. Choke side will be a 3-inch minimum diameter, kill line shall be at least 2-inch diameter 3 inch diameter choke line 2 3 inch choke line valves 2 inch kill line 2 chokes with 1 remotely controlled from rig floor (see Figure 2) 2 2 inch kill line valves and a check valve Upper kelly cock valve with handle available When the expected pressures approach working pressure of the system, 1 remote kill line tested to stack pressure (which shall run to the outer edge of the substructure and be unobstructed) Lower kelly cock valve with handle available Safety valve(s) and subs to fit all drill string

Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM

Well Number: 114H

connections in use Inside BOP or float sub available Pressure gauge on choke manifold All BOPE connections subjected to well pressure shall be flanged, welded, or clamped Fill-up line above the uppermost preventer. C. Auxiliary Equipment Audio and visual mud monitoring equipment shall be placed to detect volume changes indicating loss or gain of circulating fluid volume. (OOS 1, III.C.2) Gas Buster will be used below intermediate casing setting depth. Upper and lower kelly cocks with handles, safety valve and subs to fit all drill string connections and a pressure gauge installed on choke manifold.

Requesting Variance? YES

Variance request: Centennial Resource Production, LLC hereby requests to use a flex hose on H&P choke manifold for the Juliet Fed Com 113H well. The Flex Hose specifications are listed on the following pages.

Testing Procedure: The BOP test shall be performed before drilling out of the surface casing shoe and will occur at a minimum: a. when initially installed b. whenever any seal subject to test pressure is broken c. following related repairs d. at 30 day intervals e. checked daily as to mechanical operating conditions. The ram type preventer(s) will be tested using a test plug to 250 psi (low) and 5,000 psi (high) (casinghead WP) with a test plug upon its installation onto the 13 surface casing. If a test plug is not used, the ram type preventer(s) shall be tested to 70% of the minimum internal yield pressure of the casing. The annular type preventer(s) shall be tested to 3500 psi. Pressure will be maintained for at least 10 minutes or until provisions of the test are met, whichever is longer. A Sundry Notice (Form 3160 5), along with a copy of the BOP test report, shall be submitted to the local BLM office within 5 working days following the test. If the bleed line is connected into the buffer tank (header), all BOP equipment including the buffer tank and associated valves will be rated at the required BOP pressure. The BLM office will be provided with a minimum of four (4) hours notice of BOP testing to allow witnessing. The BOP Configuration, choke manifold layout, and accumulator system, will be in compliance with Onshore Order 2 for a 5,000 psi system. A remote accumulator controls, bleed lines, etc., will be identified at the time of the BLM 'witnessed BOP test. Any remote controls will be capable of both opening and closing all preventers and shall be readily accessible.

Choke Diagram Attachment:

HP489_10M_Choke_Manifold_20201101220449.pdf

BOP Diagram Attachment:

CDEV_Well_Control_Plan_20201101230926.pdf

HP489_BOP_Schematic_CoFlex_Choke_5K_2019_1_29_20201101220457.pdf

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
	CONDUCT OR	26	20.0	NEW	API	N	0	120	0	120	3468	3348	120	H-40		OTHER - weld						
2	SURFACE	17.5	13.375	NEW	API	N	0	1130	0	1130	3468	2338	1130	J-55		OTHER - BTC	2.03	27.8 2	DRY	13.8 5	DRY	13.8 5
3		12.2 5	9.625	NEW	API	N	0	5385	0	5385	3468	-1917	5385	J-55	40	LT&C	1.3	8.45	DRY	2.41	DRY	2.92
4	PRODUCTI ON	8.75	5.5	NEW	API	N	0	9896	0	9529	3468	-6061	9896	T-95		OTHER - VA roughneck	2.24	15.2 6	DRY	2.92	DRY	2.92

Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM

Well Number: 114H

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
5	PRODUCTI ON	8.5	5.5	NEW	API	N	9896	17042	9529	9529	-6061	-6061	7146	T-95	23	AC OTHER - VA roughneck AC	2.24	15.2 6	DRY	2.92	DRY	2.92

Casing Attachments

Casing ID: 1 String CONDUCTOR

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 2 String SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

CASING_ASSUMPTIONS_WORKSHEET_20201216124342.pdf

Received by OCD: 6/22/2022 2:51:41 PM

Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM

Well Number: 114H

Casing Attachments

Casing ID: 3 String INTERMEDIATE Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
CASING_ASSUMPTIONS_WORKSHEET_20201101222024.pdf
Casing ID: 4 String PRODUCTION
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
CASING_ASSUMPTIONS_WORKSHEET_20201101221404.pdf
5.5in_x_23ppf_T95_VAroughneck_20201216124832.pdf
Casing ID: 5 String PRODUCTION
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
CASING_ASSUMPTIONS_WORKSHEET_20201101221651.pdf
5.5in_x_23ppf_T95_VAroughneck_20201216125132.pdf

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Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM

Well Number: 114H

Section	4 -	Cement
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String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	0	0

CONDUCTOR	Lead	0	120	121	1.49	12.9	181	0	Grout	Bentonite 4% BWOC, Cellophane #/sx, CaCl2 2% BWOC.
										2 /0 BWOC.

SURFACE	Lead	0	630	503	1.74	13.5	875	100	Class C Premium	Premium Gel Bentonite 4%, C-45 Econolite 0.25%, Phenoseal 0.25#/sk, CaCl 1%, Defoamer C-41P 0.75%
SURFACE	Tail	630	1130	518	1.34	14.8	695	100	Class C Premium	C-45 Econolite 0.10%, CaCl 1.0%
INTERMEDIATE	Lead	0	4885	1152	3.44	10.7	3965	150	TX Lightweight	Salt 1.77/sk, C-45 Econolite 2.25%, STE 6.00%, Citric Acid 0.18%, C-19 0.10%, CSA-1000 0.20%, C- 530P 0.30%, CTB-15 LCM 7#/sk, Gyp Seal 8#/sk
INTERMEDIATE	Tail	4885	5385	141	1.33	14.8	188	20	Class C Premium	C-45 Econolite 0.10%, Citric acid 0.05%, C503P 0.25%
PRODUCTION	Lead	0	8995	883	3.41	10.6	3011	30	TXI Lightweight	Salt 8.98#/sk, STE 6.00%, Citric acid 0.20%, CSA-1000 0.23%, C47B 0.10%, C- 503P 0.30%
PRODUCTION	Tail	8995	1704 2	1880	1.24	14.2	2331	25	50:25:25 Class H: Poz: CPO18	Citric acid 0.03%, CSA- 1000 0.05%, C47B 0.25%, C-503P 0.30%

Well Name: JULIET FEDERAL COM

Well Number: 114H

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Section 5 - Circulating Medium

Mud System Type: 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: Sufficient quantities of mud materials will be on the well site at all times for the purpose of assuring well control and maintaining wellbore integrity. Surface interval will employ fresh water mud. The intermediate hole will utilize a diesel emulsified brine fluid to inhibit salt washout and prevent severe fluid losses. The production hole will employ oil base fluid to inhibit formation reactivity and of the appropriate density to maintain well control.

Describe the mud monitoring system utilized: Centrifuge separation system. Open tank monitoring with EDR will be used for drilling fluids and return volumes. Open tank monitoring will be used for cement and cuttings return volumes. Mud properties will be monitored at least every 24 hours using industry accepted mud check practices.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1130	OTHER : FW	8.6	9.5							
1130	5385	OTHER : Brine	9	10							
5385	1704 2	OTHER : Brine/OBM	8.8	10							

Section 6 - Test, Logging, Coring

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

Will utilize MWD (Gamma Ray logging) from intermediate hole to TD of the well.

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

DIRECTIONAL SURVEY, GAMMA RAY LOG,

Coring operation description for the well:

N/A

Received by OCD: 6/22/2022 2:51:41 PM

Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM

Well Number: 114H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4955

Anticipated Surface Pressure: 2858

Anticipated Bottom Hole Temperature(F): 170

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

 $H2S_Plan_Juleit_Fed_Com_114H_20201216133129.pdf$

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

JULIET_FED_COM_114H___DIRECTIONAL_PLAN___100__STATIONS_20201216133422.pdf

Other proposed operations facets description:

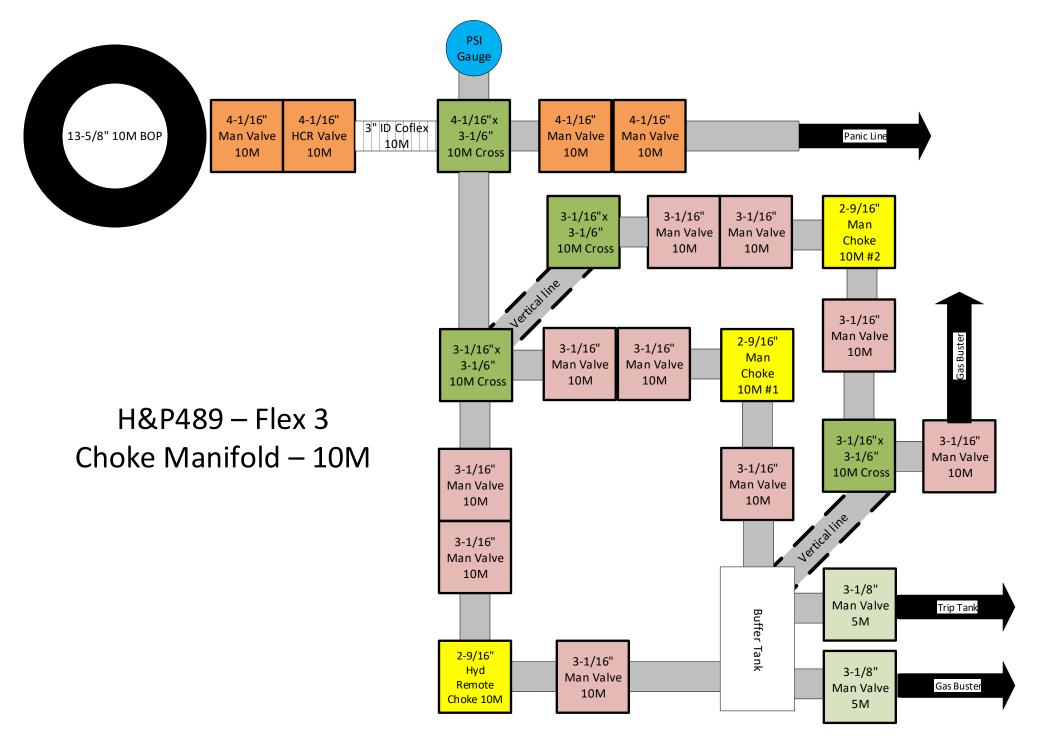
Gas Capture, WBD, Geo prog attached.

Other proposed operations facets attachment:

CRD_Batch_Setting_Procedures_20201101230021.pdf GEOPROG_Juliet_Fed_114H_PRELIM_20201216133457.pdf Juliet_Fed_Com_114H_Drilling_Program_3_String_Avalon_CactusWH_20201216133516.pdf Juliet_Fed_Com_114H_WBD__Proposed__20201216133527.pdf Juliet_113H_514H_Gas_Capture_Plan_20201216135459.pdf

Other Variance attachment:

H_P_489_Flex_Hose_Specs_Continental_Hose_SN_67255_20201101230253.pdf



Centennial Resource Development - Well Control Plan

A. Component and Preventer Compatibility Table

Component	OD (inches)	Preventer	RWP
Drillpipe	5	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 – 5.5	
Heavyweight Drillpipe	5	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 – 5.5	
Drill collars and MWD tools	6 ¾	Annular	5M
Mud Motor	6 ¾	Annular	5M
Production Casing	5-1/2	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 – 5.5	
All	0 - 13 5/8	Annular	5M
Open-hole	-	Blind rams	_10M

VBR = Variable Bore Rams

RWP = Rated Working Pressure

MWD = Measurement While Drilling (directional tools)

B. Well Control Procedures

I. <u>General Procedures While Drilling:</u>

- 1. Sound alarm (alert crew).
- 2. Space out drill-string.
- 3. Shut down pumps and stop rotary.
- 4. Open HCR
- 5. Shut-in well utilizing upper VBRs.
- 6. Close choke
- 7. Confirm shut-in.
- 8. Notify rig manager and Centennial company representative.
- 9. Call Centennial drilling engineer
- 10. Read and record
 - I. Shut-in drillpipe pressure (SIDPP) and shut-in casing pressure (SCIP).
 - II. Pit gain
 - III. Time
- 11. Regroup, identify forward plan

II. General Procedure While Tripping

- 1. Sound alarm (alert crew).
- 2. Stab full opening safety valve and close
- 3. Space out drillstring.
- 4. Open HCR
- 5. Shut-in well utilizing upper VBRs
- 6. Close choke
- 7. Confirm shut-in.
- 8. Notify rig manager and Centennial company representative.
- 9. Call Centennial drilling engineer
- 10. Read and record:
 - I. SIDPP AND SICP
 - II. Pit gain
 - III. Time
- 11. Regroup and identify forward plan.

III. General Procedure While Running Casing

- 1. Sound alarm (alert crew)
- 2. Stab full opening safety valve and close
- 3. Space out string.
- 4. Open HCR
- 5. Shut-in well utilizing upper VBRs.
- 6. Close choke
- 7. Confirm shut-in.
- 8. Notify rig manager and Centennial company representative.
- 9. Call Centennial drilling engineer
- 10. Read and record:
 - I. SIDPP AND SICP
 - II. Pit gain
 - III. Time
- 11. Regroup and identify forward plan.

IV. General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Open HCR
- 3. Shut-in with blind rams
- 4. Close choke
- 5. Confirm shut-in
- 6. Notify rig manager and Centennial company representative.
- 7. Call Centennial drilling engineer
- 8. Read and record:
 - I. SIDPP AND SICP
 - II. Pit gain
 - III. Time
- 9. Regroup and identify forward plan.

V. General Procedures While Pulling BHA Thru BOP Stack

Ι.

1. Prior to pulling last joint of drillpipe thru stack:

- Perform flow check, if flowing
 - a. Sound alarm, alert crew
 - b. Stab full opening safety valve and close
 - c. Space out drillstring with tool joint just beneath the upper pipe ram.
 - d. Open HCR
 - e. Shut-in utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut-in
 - h. Notify rig manager and Centennial company representative.
 - i. Call Centennial drilling engineer
 - j. Read and record:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
- II. Regroup and identify forward plan

2. With BHA in the BOP stack and compatible ram preventer and pipe combo immediately available:

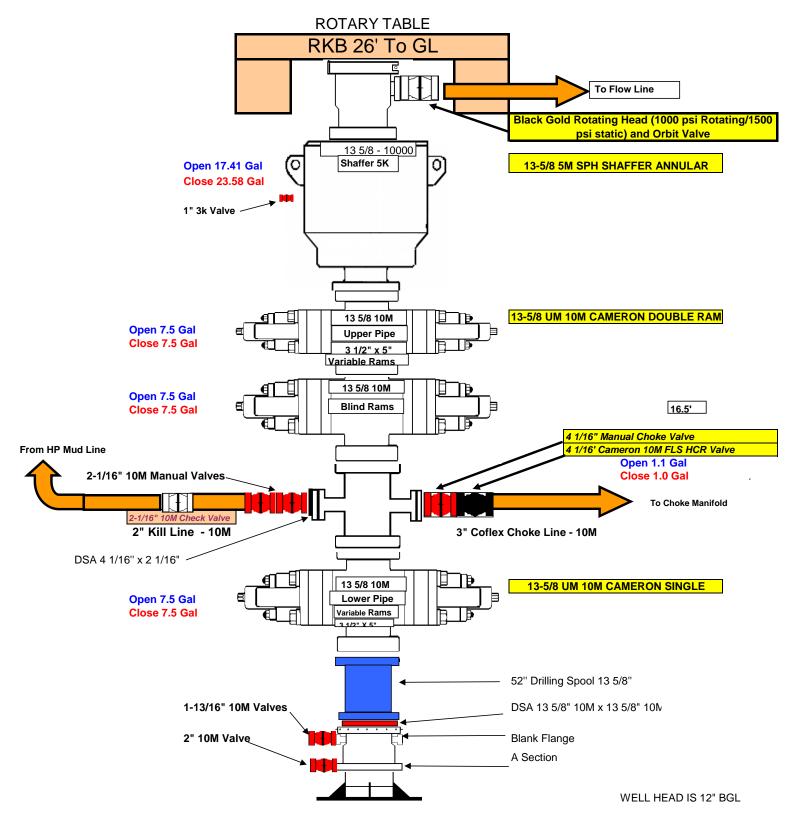
- a. Sound alarm, alert crew
- b. Stab full opening safety valve and close
- c. Space out drillstring with tool joint just beneath the upper pipe ram.
- d. Open HCR
- e. Shut-in utilizing upper VBRs
- f. Close choke
- g. Confirm shut-in
- h. Notify rig manager and Centennial company representative.
- i. Call Centennial drilling engineer
- j. Read and record:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
- II. Regroup and identify forward plan

3. With BHA in the BOP stack and no compatible ram preventer and pipe combo immediately availiable:

- I. Sound alarm, alert crew.
- II. If possible to pick up high enough, pull string clear of the stack and follow Open Hole (III) scenario.
- III. If impossible to pick up high enough to pull the string clear of the stack:
 - a. Stab crossover, make up one joint/stand of drill pipe and full opening safety valve and close.
 - b. Space out drillstring with tool joint just beneath the upper pipe ram.
 - c. Open HCR
 - d. Shut-in utilizing upper VBRs.
 - e. Close choke
 - f. Confirm shut-in
 - g. Notify rig manager and Centennial company representative.
 - h. Call Centennial drilling engineer
 - i. Read and record:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
- IV. Regroup and identify forward plan.

** If annular is used to shut-in well and pressure builds to OR is expected to get to 50% of RWP, confirm space-out and swap to upper VBRs for shut-in.

H&P 489



CASING ASSUMPTIONS WORKSHEET:

Centralizer Program:

Surface:	 - 3 welded bow spring centralizers, one on each of the bottom 3 joints, plus one on the shoe joint (4 minimum) - No Cement baskets will be run
Production:	 - 1 welded bow spring centralizer on a stop ring 6' above float shoe - 1 centralizer every other joint to the top of the tail cement - 1 centralizer every 4 joints to 500' below the top of the lead cement - The actual number and placement of centralizers will be determined from hole deviation and potential production zones. Centralizers will be run for maximum practical standoff and through all potential productive zones.

• All casing strings below the conductor shall be tested, prior to drilling out the casing shoe, to 0.22 psi/ft of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the internal yield pressure of the casing. If pressure declines more than 10 percent in 30 minutes, corrective action will be taken.

No freshly hard banded pipe will be rotated in the surface casing

- CENTENNIAL RESOURCE DEVELOPOMENT will not employ an air-drill rig for the surface casing. The casing shoe will be tested by drilling 5'-10' out from under the shoe and pressure testing to the maximum expected mud weight equivalent as shown in the mud program listed in the drilling plan.

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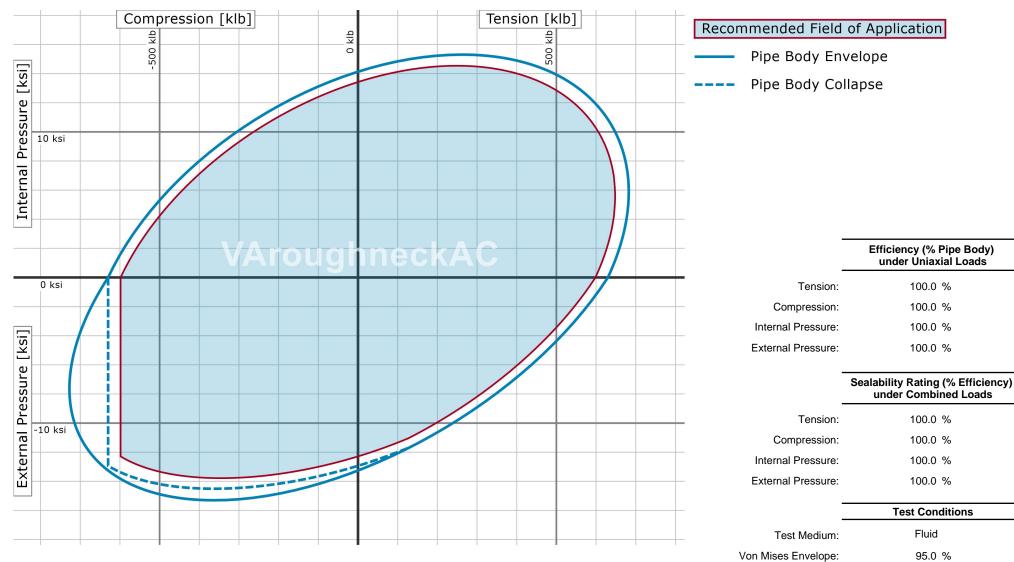
TECHNICAL DATA SHEET

Connection: VAroughneckA	C		Grade: T95-1			
Size: 5 1/2 in X 23.00 lb/ft		Δ	laterial:	US Customary	Metric	
Drift: standard			Yield Strength Min.	95,000 psi	655 Mpa	
Bevel: standard			Yield Strength Max.	110,000 psi	758 Mpa	
			Tensile Strength Min.	105,000 psi	724 Mpa	
Pipe:						
	US Customary	Metric		US Customary	Metric	
Nominal OD:	5.500 in	139.70 mm	Wall Thickness:	0.415 in	10.54 mm	
Nominal ID:	4.670 in	118.62 mm	Standard Drift:	4.545 in	115.44 mm	
Nominal Weight:	23.00 lb/ft	34.38 kg/m	Pipe Body Yield Strength:	630 klb	2,800 kN	
Pipe Cross Section:	6.630 in ²	4,277.41 mm ²				
Connection:						
	US Customary	Metric				
OD:	6.300 in	160.02 mm	Threads per inch:	5 Threads		
ID:	4.669 in	118.60 mm				
Length:	8.976 in	228.00 mm				
Connection Performance	(Uniaxial Load):					
	US Customary	Metric		US Customary	Metric	
Joint Strength:	630 klb	2,800 kN	Tension Efficiency:	> 100.0 %		
Collapse Resistance:.	12,940 psi	89.20 Mpa	Displacement:	1.242 gal/ft	15.43 l/m	
Internal Yield Pressure:	12,550 psi	86.50 Mpa	Production:	0.890 gal/ft	11.05 l/m	
Load on Coupling Face:	542 klb	2,410 kN				
Field Make Up (Friction Fa	actor = 1.0):					
	US Customary	Metric		US Customary	Metric	
Minimum Torque:	16,150 ft.lb	21,890 Nm	Make-Up Loss:	4.370 in	111.00 mm	
Optimum Torque:	17,940 ft.lb	24,320 Nm	Yield Torque:	22,420 ft.lb	30,400 Nm	
Maximum Torque:	19,730 ft.lb	26,750 Nm				
Min. Torque on Shoulder:	%					



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LOAD ENVELOPE



The graph is calculated under consideration of the requirements of EN ISO 13679 and API 5C3. The combined loads are calculated without the consideration of wall thickness tolerances and differ from the values in the data sheet, which are calculated with tolerances determined by API. Any printout is NOT SUBJECT TO REGULAR REVISION. The generated performance envelope shall solely be used as a tool to facilitate the comparison of performance properties under combined loads, of different grades, sizes and connections of voestalpine Tubulars products. Field-specific safety/design factors as well as other loads are not considered. Thus the results shall by no means be used to replace the own string design or to justify any warranty/guaranty cases.

20.00 °/100ft

Bending:

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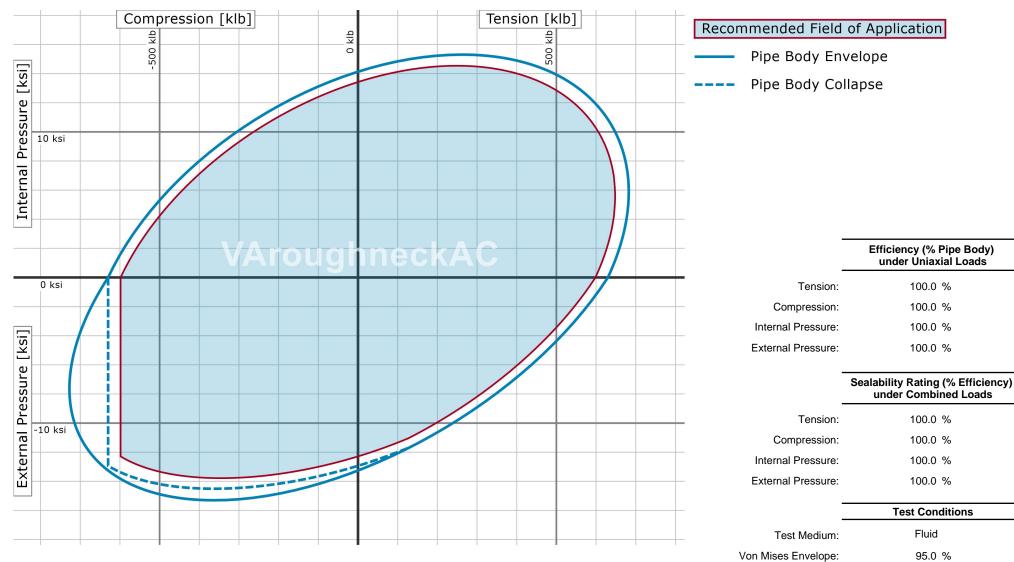
TECHNICAL DATA SHEET

Connection: VAroughneckA	С	Grade: T95-1			
Size: 5 1/2 in X 23.00 lb/ft		Material:		US Customary	Metric
Drift: standard			Yield Strength Min.	95,000 psi 110,000 psi	655 Mpa 758 Mpa
Bevel: standard			Yield Strength Max.		
			Tensile Strength Min.	105,000 psi	724 Mpa
Pipe:					
	US Customary	Metric		US Customary	Metric
Nominal OD:	5.500 in	139.70 mm	Wall Thickness:	0.415 in	10.54 mm
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Pipe Cross Section:	6.630 in ²	4,277.41 mm ²			
Connection:					
	US Customary	Metric			
OD:	6.300 in	160.02 mm	Threads per inch:	5 Threads	
ID:	4.669 in	118.60 mm			
Length:	8.976 in	228.00 mm			
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	US Customary	Metric		US Customary	Metric
Joint Strength:	630 klb	2,800 kN	Tension Efficiency:	> 100.0 %	
Collapse Resistance:.	12,940 psi	89.20 Mpa	Displacement:	1.242 gal/ft	15.43 l/m
Internal Yield Pressure:	12,550 psi	86.50 Mpa	Production:	0.890 gal/ft	11.05 l/m
Load on Coupling Face:	542 klb	2,410 kN			
Field Make Up (Friction Fa	actor = 1.0):				
	US Customary	Metric		US Customary	Metric
Minimum Torque:	16,150 ft.lb	21,890 Nm	Make-Up Loss:	4.370 in	111.00 mm
Optimum Torque:	17,940 ft.lb	24,320 Nm	Yield Torque:	22,420 ft.lb	30,400 Nm
Maximum Torque:	19,730 ft.lb	26,750 Nm			
Min. Torque on Shoulder:	%				



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LOAD ENVELOPE



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HYDROGEN SULFIDE CONTINGENCY PLAN

Juliet Fed Com 114H

Section 27

T 24S R 34E

Lea County, NM

Initial Date: 3/4/18 Revision Date:

Table of Contents

Page 3: Introduction

- Page 4: Directions to Location
- Page 5: Safe Briefing Areas
- Page 6: Drill Site Location Setup
- Page 7: Toxicity of Various Gases
- Page 10: H2S Required Equipment
- Page 11: Determination of Radius of Exposure
- Page 12: Emergency Contact List

INTRODUCTION

This plan specifies precautionary measures, safety equipment, emergency procedures, responsibilities, duties, and the compliance status pertaining to the production operations of Hydrogen Sulfide producing wells on:

Centennial Resource Development, Inc.

This plan will be in full effect prior to and continuing with all drilling operations for all wells producing potential Hydrogen Sulfide on the

Juliet Fed Com 114H

This plan was developed in response to the potential hazards involved when producing formations that may contain Hydrogen Sulfide (H₂S) It has been written in compliance with current New Mexico Oil Conservation Division Rule 118 and Bureau of Land Management 43 CFR 3160 Onshore Order No. 6.

All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a

This plan shall require the full cooperation and efforts of all individuals participating in the production of potential H₂S wells.

Each individual is required to know their assigned responsibilities and duties in regard to normal production operations and emergency procedures.

Each person should thoroughly understand and be able to use all safety related equipment on the production facility.

Each person should become familiar with the location of all safety equipment and become involved in ensuring that all equipment is properly stored, easily accessible, and routinely maintained.

An ongoing training program will remain in effect with regular training, equipment inspections, and annual certifications for all personnel.

Centennial Resource Development, Inc. shall make every reasonable effort to provide all possible safeguards to protect all personnel, both on this location and in the immediate vicinity, from the harmful effects of H₂S exposure, if a release to the atmosphere should occur.

DIRECTIONS TO LOCATION

Juliet Fed Com 114H

Section 27

T 24S R 34E

Lea County, NM

PROCEED IN A WESTERLY, THEN NORTHWESTERLY, THEN WESTERLY DIRECTION FROM JAL, NEW MEXICO ALONG NM-128 APPROXIMATELY 18.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE BEGINNING OF THE PROPOSED ROMEO FEDERAL COM 311H, 312H, 111H & 112H ACCESS ROAD TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY DIRECTION APPROXIMATELY 1813' TO THE BEGINNING OF THE PROPOSED ACCESS ROAD "A" TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 132' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM JAL, NEW MEXICO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 19.6 MILES.

SAFE BRIEFING AREAS

Two areas will be designated as "SAFE BRIEFING AREAS".

The Primary Safe Briefing Area

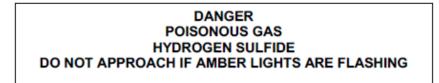
If the Primary Safe Briefing Area cannot be used due to wind conditions; the designated secondary safe briefing area will be used.

These two areas are so designated for accessibility reasons related to self-contained safe breathing air device locations, evacuation muster point utility, and for ease of overall communication, organizational support, as well as the all-important prevailing wind directions. Drawings of the facility denoting these locations are included on Page 15.

If H₂S is detected in concentrations equal to or in excess of 15 PPM, all personnel not assigned emergency duties are to assemble in the appropriate "SAFE BRIEFING AREA" for instructions.

Wind Direction Indicators: A windsock, shall be positioned, allowing the wind direction to be observed from anywhere on the charted facility location.

Warning-DANGER SIGNS for Approaching Traffic: All signs shall also be illuminated under conditions of poor visibility.



An amber strobe light system will be activated for H₂S concentrations of 10 PPM or greater and an audible alarm will sound when H₂S exceeds 15 ppm, and. This condition will exist until the all clear is given.

DRILL SITE LOCATION:

- 1. The drilling rig should be situated on location such that the prevailing winds blow across the rig toward the reserve pit or at right angles to a line from the rig to the reserve pit.
- 2. The entrance to the location should be designated so that it can be barricaded if Hydrogen Sulfide emergency conditions arise. An auxiliary exit (or entrance) should be available in case of a catastrophe; a shift in wind direction would not preclude escape from the location. Appropriate warning signs and flags should be placed at all location entrances.
- 3. Once H2S safety procedures are established on location, no beards or facial hair, which will interfere with face seal or mask, will be allowed on location.
- 4. A minimum of two BRIEFING AREAS will be established, no less than 250 feet from the wellhead and in such location that at least one area will be up-wind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated briefing areas for instructions.
- 5. A safety equipment trailer will be station at one of the briefing areas.
- Windsocks will be installed and wind streamers (6 to 8 feet above ground level) placed at the location entrance. Windsocks shall be illuminated for nighttime operations. Personnel should develop wind direction consciousness.
- 7. The mud-logging trailer will be located so as to minimize the danger from the gas that breaks out of the drilling fluid.
- 8. Shale shaker mud tanks will be located so as to minimize the danger from gas that breaks out of the drilling fluid.
- 9. Electric power plant(s) will be located as far from the well bore as practical so that it may be used under conditions where it otherwise would have to be shut down.
- 10. When approaching depth where Hydrogen Sulfide may be encountered, appropriate warning signs will be posted on all access roads to the location and at the foot of all stairways to the derrick floor.
- 11. Appropriate smoking areas will be designated, and smoking will be prohibited elsewhere.

The table below lists various poisonous gases and the concentrations at which they become dangerous.

TOXICITY OF GASES (Taken from API RP-49 September 1974 – Re-issued August 1978)										
Common Name	Chemical Formula	Gravity (Air = 1)	Threshold 1 Limit	Hazardous 2 Lethal 3 Limit Limit						
Hydrogen Sulfide	H_2S	1.18	10 ppm	250 ppm/1hr	600 ppm					
Sulfur Dioxide	$\begin{array}{c c} SO_2 & 2.21 \\ \hline cbon & CO & 0.97 \\ \hline \end{array}$		20 ppm		1000 ppm					
Carbon Monoxide			50 ppm	400 ppm/1hr	1000 ppm					
Carbon Dioxide	CO_2	1.52	5000 ppm	5%	10%					
Methane	CH ₄	0.55	90000 ppm	Combustible A						

TOXICITY OF VARIOUS GASES

Properties of Gases

The produced gas will probably be a mixture of Carbon Dioxide, Hydrogen Sulfide, and Methane.

Carbon Dioxide

Carbon Dioxide (CO₂) is usually considered inert and is commonly used to extinguish fires.

It is heavier than air (1.52 times) and it will concentrate in low areas of still air.

Humans cannot breathe air containing more than 10% CO₂ without losing consciousness. Air containing 5% CO₂ will cause disorientation in a few minutes.

Continued exposures to CO₂ after being affected will cause convulsions, coma, and respiratory failure.

The threshold limit of CO₂ is 5000 ppm.

Short-term exposure to 50,000 PPM (5%) is reasonable. This gas is colorless and odorless and can be tolerated in relatively high concentrations.

Hydrogen Sulfide

Hydrogen Sulfide (H₂S) itself is a colorless, transparent gas and is flammable. It is heavier than air and, hence, may accumulate in low places.

Although the slightest presence of H₂S in the air is normally detectable by its characteristic "rotten egg" odor, it is dangerous to rely on the odor as a means of detecting excessive concentrations because the sense of smell is rapidly lost, allowing lethal concentrations to be accumulated without warning. The following table indicates the poisonous nature of Hydrogen Sulfide.

	HYDROGEN SULFIDE TOXICITY									
	Concent	ration	Effects							
$%H_2S$	PPM	GR/100 SCF 1								
0.001	10	0.65	Safe for 8 hours without respirator. Obvious and unpleasant odor.							
0.002	20	1.30	Burning in eyes and irritation of respiratory tract after on hour.							
0.01	100	6.48	Kills smell in 3 to 15 minutes; may sting eyes and throat.							
0.02	200	12.96	Kills smell shortly; stings eyes and throat.							
0.05	500	32.96	Dizziness; breathing ceases in a few minutes; need prompt artificial respiration.							
0.07	700	45.92	Unconscious quickly; death will result if not rescued promptly							
0.10	1000	64.80	DEATH!							
Note: 1	grain per 10	00 cubic feet								

Sulfur Dioxide

Sulfur Dioxide is a colorless, transparent gas and is non-flammable.

Sulfur Dioxide (SO₂) is produced during the burning of H₂S. Although SO₂ is heavier than air, it will be picked up by a breeze and carried downwind at elevated temperatures. Since Sulfur Dioxide is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect. The following table indicates the toxic nature of the gas.

•

SULFUR DIOXIDE TOXICITY									
Conce	ntration	Effects							
%SO ₂	PPM								
0.0005	3 to 5	Pungent odor-normally a person can detect SO ₂ in this							
		range.							
0.0012	12	Throat irritation, coughing, and constriction of the chest							
		tearing and smarting of eyes.							
0.15	150	So irritating that it can only be endured for a few							
		minutes.							
0.05	500	Causes a sense of suffocation, even with first breath.							

H₂S REQUIRED EQUIPMENT LIST

RESPIRATORY SAFETY SYSTEMS

- Working cascade system available on rig floor and pit system & 750' of air line hose
- Four (4) breathing air manifolds
- Four (4) 30-minute rescue packs
- Five (5) work/Escape units
- Five (5) escape units
- One (1) filler hose for the work/escape/rescue units

DETECTION AND ALARM SYSTEM

- 4 channel H2S monitor
- 4 wireless H2S monitors
- H2S alarm system (Audible/Red strobe)
- Personal gas monitor for each person on location
- Gas sample tubes

WELL CONTROL EQUIPMENT

- Flare line with remote ignitor and backup flare gun, placed 150' from wellhead
- Choke manifold with remotely operated choke
- Mud gas separator

VISUAL WARNING SYSTEMS

- One color code condition sign will be placed at each entrance reflecting possible conditions at the site
- A colored condition flag will be on display, reflecting current condition at the site at the time
- At least 4 wind socks placed on location, visible at all angles and locations

MUD PROGRAM

- Mud will contain sufficient weight and additives to control and minimize H2S

METALLURGY

- All drill strings, casing, tubing, wellhead, BOP, spools, kill lines, choke manifold and lines, and valves shall be suitable for anticipated H2S volume and pressure

COMMUNICATION

- Cell phones, intercoms, and satellite phones will be available on location

ADDITIONAL SAFETY RELATED ITEMS

- Stretcher
- 2 OSHA full body harness
- 20# class ABC fire extinguisher

DETERMINATION OF RADIUS OF EXPOSURE

Potentially hazardous volume means a volume of gas of such H2S concentration and flow rate that it may result in radius of exposure-calculated ambient concentrations of 100 ppm H2S at any occupied residence, school, church, park, school bus stop, place of business or other area where the public could reasonably be expected to frequent, or 500 ppm H2S at any Federal, State, County or municipal road or highway.

Currently there are no residence located within the ROE

Radius of exposure means the calculation resulting from using the Pasquill -Gifford derived equation, or by such other method(s) that may be approved by the authorized officer. Advanced Fire and Safety has provided the Pasquill-Gifford formula in excel format for simple calculations.

NEW MEXICO OIL & GAS CONSERVATION DIVISION 118

Juliet Fed Com 114H

H2S Concentration- 250 PPM

Maximum Escape Volume- 5000 MCF/Day

100 PPM Radius of Exposure - 116 (Formula= 1.589 x (250/1000000) x (5000 x 1000) x .6258

500 PPM Radius of Exposure (Block 16)- 53 Formula= .4546 x (250/1000000) x (5000 x 1000) x .6258

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EMERGENCY CONTACT LIST

911 is available in the area										
NAME	POSITION	COMPANY	NUMBER							
Centennial Contacts										
Jeremy Ray	Drilling Engineer	CDEV	303-263-7872							
Ricky Mills/John Helm	Superintendent	CDEV	432-305-1068							
Mike Ponder/Wayne Miller	Field Superintendent	CDEV	432-287-3003							
Brett Thompson	Drilling Manager	CDEV	720-656-7027							
Reggie Phillips	HSE Manager	CDEV	432-638-3380							
H&P 650 Drilling Office	Drilling Supervisor	CDEV	432-538-3343							
	Local Emergency Resp	onse								
Fire Department			575-395-2511							
Jal Community Hospital			505-395-2511							
State Police			505-827-9000							
Lea County Sheriff			575-396-3611							
	Safety Contractor									
Advanced Safety	Office	Advanced Safety	833-296-3913							
Joe Gadway	Permian Supervisor	Advanced Safety	318-446-3716							
Clint Hudson	Operations Manager	Advanced Safety	337-552-8330							
	Well Control Compa	ny								
Wild Well Control			866-404-9564							
	Contractors									
Tommy E Lee	Pump Trucks		432-813-7140							
Paul Smith	Drilling Fluids	Momentum	307-258-6254							
Compass Coordinators	Cement	Compass	432-561-5970							

NEW MEXICO

LEA JULIET FEDERAL COM JULIET FED COM 114H

JULIET FED COM 114H

Plan: PWP0

Standard Survey Report

15 October, 2020

Received by OCD: 6/22/2022 2:51:41 PM

Centennial Resource Development

Survey Report

Company:	NEW MEXICO			Local Co	-ordinate Refere	ence:	Well JULIET FEI	D COM 114H			
Project:	LEA	EA JLIET FEDERAL COM JLIET FED COM 114H			TVD Reference: MD Reference:			RKB=3468.6 @ 3494.6ft (HP 489) RKB=3468.6 @ 3494.6ft (HP 489)			
Site:	JULIET FEDERAL										
Well:	JULIET FED COM				ference:		True				
	JULIET FED COM	114H		-	alculation Methe	od:	Minimum Curvat	ure			
Design:	PWP0			Database	:		Compass				
Project	LEA										
Map System: Geo Datum: Map Zone:	Universal Trans North American Zone 13N (108	Datum 1983	(US Survey Feet)	System	ı Datum:		Mean Sea Leve	1			
Site	JULIET FEDE	RAL COM									
Site Position:			Northing:		0.00 m	Latitude:			0° 0' 0.000		
From:	Мар		Easting:		0.00 m	Longitude):		109° 29' 19.478		
Position Uncertain	•	0.0 ft	Slot Radius:		13.200 in	Grid Conv			0.00 °		
Well	JULIET FED (
Well Position	+N/-S	0.0 ft	Northing:		3,562,602.0		Latitude:		32° 11' 26.134		
B	+E/-W	0.0 ft	Easting:		645,220.7		Longitude:		103° 27' 33.952		
Position Uncertain	ty	0.0 ft	Wellhead Elev	vation:		ft	Ground Level:		3,468.6 ft		
Wellbore	JULIET FED	COM 114H									
				_		_					
Magnetics	Model Na	ime	Sample Date	Dec	Declination (°)		ip Angle (°)	Strength (nT)			
	IGRF	200510	12/31/2009		7.70		60.23	48	,784.77489044		
Design	PWP0										
Audit Notes:	1 11 0										
			Phase:	PROTOTY		Tie On Denth			0.0		
Version:			Phase:			Tie On Depth			0.0		
Vertical Section:		-	om (TVD) ït)	+N/-S +E/-W (ft) (ft)		+E/-W (ft)	Γ				
		•	0.0		0.0	0.0		(°)	1.27		
Survey Tool Progra	am	Date 10/15/2	2020								
From (ft)	To (ft)	Survey (Wellbo	ro)		Tool Name		Description				
0.		• •	FED COM 114H)		MWD+IFR1+M	9			Multi-Station Correcti		
0.	.0 17,042.3	FWF0 (JOLIET					0000_002_				
Planned Survey											
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)		
0.	.0 0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00		
100.			100.0	0.0	0.0	0.0	0.00	0.00	0.00		
200.			200.0	0.0	0.0	0.0	0.00	0.00	0.00		
300.			300.0	0.0	0.0	0.0	0.00	0.00	0.00		
400.	.0 0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00		
500.	.0 0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00		
600.			600.0	0.0	0.0	0.0	0.00	0.00	0.00		
700.			700.0	0.0	0.0	0.0	0.00	0.00	0.00		
800	0 0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00		

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Page 2

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Received by OCD: 6/22/2022 2:51:41 PM

Centennial Resource Development

Survey Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well JULIET FED COM 114H
Project:	LEA	TVD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
Site:	JULIET FEDERAL COM	MD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
Well:	JULIET FED COM 114H	North Reference:	True
Wellbore:	JULIET FED COM 114H	Survey Calculation Method:	Minimum Curvature
Design:	PWP0	Database:	Compass
	Project: Site: Well: Wellbore:	Project: LEA Site: JULIET FEDERAL COM Well: JULIET FED COM 114H Wellbore: JULIET FED COM 114H	Project: LEA TVD Reference: Site: JULIET FEDERAL COM MD Reference: Well: JULIET FED COM 114H North Reference: Wellbore: JULIET FED COM 114H Survey Calculation Method:

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	1.00	165.82	2,100.0	-0.8	0.2	-0.8	1.00	1.00	0.00
2,200.0	2.00	165.82	2,200.0	-3.4	0.9	-3.4	1.00	1.00	0.00
2,300.0	3.00	165.82	2,299.9	-7.6	1.9	-7.6	1.00	1.00	0.00
2,400.0	4.00	165.82	2,399.7	-13.5	3.4	-13.5	1.00	1.00	0.00
2,500.0	5.00	165.82	2,499.4	-21.1	5.3	-21.0	1.00	1.00	0.00
2,600.0	6.00	165.82	2,598.9	-30.4	7.7	-30.3	1.00	1.00	0.00
2,700.0	7.00	165.82	2,698.3	-41.4	10.5	-41.2	1.00	1.00	0.00
2,800.0	7.00	165.82	2,797.5	-53.2	13.4	-52.9	0.00	0.00	0.00
2,900.0	7.00	165.82	2,896.8	-65.0	16.4	-64.7	0.00	0.00	0.00
3,000.0	7.00	165.82	2,996.0	-76.9	19.4	-76.4	0.00	0.00	0.00
3,100.0	7.00	165.82	3,095.3	-88.7	22.4	-88.1	0.00	0.00	0.00
3,200.0	7.00	165.82	3,194.5	-100.5	25.4	-99.9	0.00	0.00	0.00
3,300.0	7.00	165.82	3,293.8	-112.3	28.4	-111.6	0.00	0.00	0.00
3,400.0	7.00	165.82	3,393.0	-124.1	31.4	-123.4	0.00	0.00	0.00
2 500 0	7.00	165.90	2 402 2	125.0	24.2	105 1	0.00	0.00	0.00
3,500.0 3,600.0	7.00 7.00	165.82 165.82	3,492.3 3,591.6	-135.9 -147.7	34.3 37.3	-135.1 -146.9	0.00 0.00	0.00 0.00	0.00
3,700.0	7.00	165.82	3,690.8	-147.7	40.3	-140.9 -158.6	0.00	0.00	0.00
3,800.0	7.00	165.82	3,790.1	-139.0	40.3	-130.0	0.00	0.00	0.00
3,900.0	7.00	165.82	3,889.3	-171.4	46.3	-170.4	0.00	0.00	0.00
3,900.0	7.00	105.62	3,009.3	-103.2	40.5	-102.1	0.00	0.00	0.00
4,000.0	7.00	165.82	3,988.6	-195.0	49.3	-193.9	0.00	0.00	0.00
4,100.0	7.00	165.82	4,087.8	-206.8	52.3	-205.6	0.00	0.00	0.00
4,200.0	7.00	165.82	4,187.1	-218.6	55.2	-217.4	0.00	0.00	0.00
4,300.0	7.00	165.82	4,286.3	-230.5	58.2	-229.1	0.00	0.00	0.00
4,400.0	7.00	165.82	4,385.6	-242.3	61.2	-240.9	0.00	0.00	0.00
4,500.0	7.00	165.82	4,484.8	-254.1	64.2	-252.6	0.00	0.00	0.00
4,600.0	7.00	165.82	4,584.1	-265.9	67.2	-264.3	0.00	0.00	0.00
4,700.0	7.00	165.82	4,683.4	-277.7	70.2	-276.1	0.00	0.00	0.00
4,800.0	7.00	165.82	4,782.6	-289.5	73.2	-287.8	0.00	0.00	0.00
4,900.0	7.00	165.82	4,881.9	-301.3	76.1	-299.6	0.00	0.00	0.00
5,000.0	7.00	165.82	4,981.1	-313.2	79.1	-311.3	0.00	0.00	0.00
5,100.0	7.00	165.82	5,080.4	-325.0	82.1	-323.1	0.00	0.00	0.00
5,200.0	7.00	165.82	5,179.6	-336.8	85.1	-334.8	0.00	0.00	0.00
5,300.0	7.00	165.82	5,278.9	-348.6	88.1	-346.6	0.00	0.00	0.00
	7.00		3,210.0	510.0	00.1	510.0	0.00	0.00	0.00

10/15/2020 5:51:56PM

Survey Report

company:	NEW MEXICO	Local Co-ordinate Reference:	Well JULIET FED COM 114H
roject:	LEA	TVD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
lite:	JULIET FEDERAL COM	MD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
Vell:	JULIET FED COM 114H	North Reference:	True
Vellbore:	JULIET FED COM 114H	Survey Calculation Method:	Minimum Curvature
)esign:	PWP0	Database:	Compass
	roject: ite: Vell: Vellbore:	roject: LEA ite: JULIET FEDERAL COM Vell: JULIET FED COM 114H Vellbore: JULIET FED COM 114H	roject: LEA TVD Reference: iite: JULIET FEDERAL COM MD Reference: Vell: JULIET FED COM 114H North Reference: Vellbore: JULIET FED COM 114H Survey Calculation Method:

Planned Survey

5.400.0 7.00 165.82 5.378.1 -360.4 91.1 -358.3 0.00 0.00 0.00 5.500.0 7.00 165.82 5.477.4 -372.2 94.1 97.0 -385.6 0.00 0.00 0.00 5.700.0 7.00 165.82 5.475.6 -344.1 97.0 -385.6 0.00 0.00 0.00 0.00 5.700.0 7.00 165.82 5.475.2 -407.7 102.0 -405.3 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Measur Deptr (ft)		Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,600.0 7.00 165.82 5,776.6 -394.4 97.0 -333.6 0.00 0.00 0.00 5,800.0 7.00 165.82 5,775.2 -407.7 103.0 -405.3 0.00 0.00 0.00 5,800.0 7.00 165.82 5,874.4 -419.5 106.0 -417.0 0.00 0.00 0.00 5,800.0 7.00 165.82 6,872.9 -443.1 112.0 -440.5 0.00 0.00 0.00 6,300.0 7.00 165.82 6,271.4 -465.8 117.9 -440.5 0.00	5,4			5,378.1	-360.4	91.1	-358.3	0.00	0.00	0.00
5,600.0 7.00 165.82 5,776.6 -394.4 97.0 -331.8 0.00 0.00 0.00 5,800.0 7.00 165.82 5,775.2 -407.7 103.0 -405.3 0.00 0.00 0.00 5,800.0 7.00 165.82 5,874.4 -419.5 106.0 -417.0 0.00 0.00 0.00 5,800.0 7.00 165.82 6,872.9 -443.1 112.0 -440.5 0.00 0.00 0.00 6,300.0 7.00 165.82 6,772.9 -443.1 112.0 -440.5 0.00 0.00 0.00 6,300.0 7.00 165.82 6,271.4 -456.8 117.9 -440.4 0.00 0.0	5.5	00.0 7.0	0 165.82	5.477.4	-372.2	94.1	-370.1	0.00	0.00	0.00
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8,400.0 0.00 0.00 8,360.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,500.0 0.00 0.00 8,460.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,600.0 0.00 0.00 8,560.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,700.0 0.00 0.00 8,660.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,700.0 0.00 0.00 8,660.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,800.0 0.00 0.00 8,760.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,900.0 0.00 0.00 8,860.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,995.5 0.00 0.00 8,955.9 -655.9 165.7 -652.0 0.00 0.00 0.00 9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 10.00 10.	8,2	50.0 0.0	0 0.00	8,210.4	-655.9	165.7	-652.0	1.00	-1.00	0.00
8,500.0 0.00 0.00 8,460.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,600.0 0.00 0.00 8,560.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,700.0 0.00 0.00 8,660.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,800.0 0.00 0.00 8,760.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,800.0 0.00 0.00 8,760.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,900.0 0.00 0.00 8,860.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,900.0 0.00 0.00 8,955.9 165.7 -652.0 0.00 0.00 0.00 8,995.5 0.00 0.00 8,955.9 -655.9 165.7 -652.0 10.00 10.00 0.00 9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 10.00 10.00 0.	8,3	00.0 0.0	0.00	8,260.4	-655.9	165.7	-652.0	0.00	0.00	0.00
8,600.0 0.00 0.00 8,560.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,700.0 0.00 0.00 8,660.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,800.0 0.00 0.00 8,760.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,900.0 0.00 0.00 8,760.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,900.0 0.00 0.00 8,860.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,995.5 0.00 0.00 8,955.9 -655.9 165.7 -652.0 0.00 0.00 0.00 9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 10.00 10.00 0.00 9,100.0 10.45 0.42 9,059.8 -646.4 165.8 -642.5 10.00 10.00 0.00 9,200.0	8,4	00.0 0.0	0.00	8,360.4	-655.9	165.7	-652.0	0.00	0.00	0.00
8,700.0 0.00 8,660.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,800.0 0.00 0.00 8,760.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,900.0 0.00 0.00 8,860.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,995.5 0.00 0.00 8,955.9 -655.9 165.7 -652.0 0.00 0.00 0.00 9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 0.00 0.00 0.00 9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 10.00 10.00 0.00 9,100.0 10.45 0.42 9,059.8 -646.4 165.8 -642.5 10.00 10.00 0.00 9,200.0 20.44 0.42 9,156.1 -619.8 166.0 -615.9 10.00 10.00 0.00			0.00	8,460.4	-655.9	165.7	-652.0	0.00	0.00	0.00
8,800.00.000.008,760.4-655.9165.7-652.00.000.000.008,900.00.000.008,860.4-655.9165.7-652.00.000.000.008,995.50.000.008,955.9-655.9165.7-652.00.000.000.009,000.00.450.428,960.4-655.9165.7-652.010.0010.000.009,100.010.450.429,059.8-646.4165.8-642.510.0010.000.009,200.020.440.429,156.1-619.8166.0-615.910.0010.000.00	8,6	00.0 0.0	0.00	8,560.4	-655.9	165.7	-652.0	0.00	0.00	0.00
8,900.0 0.00 0.00 8,860.4 -655.9 165.7 -652.0 0.00 0.00 0.00 8,995.5 0.00 0.00 8,955.9 -655.9 165.7 -652.0 0.00 0.00 0.00 9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 10.00 10.00 0.00 9,100.0 10.45 0.42 9,059.8 -646.4 165.8 -642.5 10.00 10.00 0.00 9,200.0 20.44 0.42 9,156.1 -619.8 166.0 -615.9 10.00 10.00 0.00	8,7	00.0 0.0	0 0.00	8,660.4	-655.9	165.7	-652.0	0.00	0.00	0.00
8,995.5 0.00 0.00 8,955.9 -655.9 165.7 -652.0 0.00 0.00 0.00 9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 10.00 10.00 0.00 9,100.0 10.45 0.42 9,059.8 -646.4 165.8 -642.5 10.00 10.00 0.00 9,200.0 20.44 0.42 9,156.1 -619.8 166.0 -615.9 10.00 10.00 0.00				8,760.4						
9,000.0 0.45 0.42 8,960.4 -655.9 165.7 -652.0 10.00 10.00 0.00 9,100.0 10.45 0.42 9,059.8 -646.4 165.8 -642.5 10.00 10.00 0.00 9,200.0 20.44 0.42 9,156.1 -619.8 166.0 -615.9 10.00 10.00 0.00	8,9			8,860.4	-655.9	165.7	-652.0			
9,100.0 10.45 0.42 9,059.8 -646.4 165.8 -642.5 10.00 10.00 0.00 9,200.0 20.44 0.42 9,156.1 -619.8 166.0 -615.9 10.00 10.00 0.00				8,955.9				0.00		
9,200.0 20.44 0.42 9,156.1 -619.8 166.0 -615.9 10.00 10.00 0.00				8,960.4		165.7			10.00	0.00
	9,1	00.0 10.4	5 0.42	9,059.8	-646.4	165.8	-642.5	10.00	10.00	0.00
9,300.0 30.44 0.42 9,246.2 -576.9 166.3 -573.0 10.00 10.00 0.00	9,2	00.0 20.4	4 0.42	9,156.1	-619.8	166.0	-615.9	10.00	10.00	0.00
	9,3	00.0 30.4	4 0.42	9,246.2	-576.9	166.3	-573.0	10.00	10.00	0.00

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Survey Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well JULIET FED COM 114H
Project:	LEA	TVD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
Site:	JULIET FEDERAL COM	MD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
Well:	JULIET FED COM 114H	North Reference:	True
Wellbore:	JULIET FED COM 114H	Survey Calculation Method:	Minimum Curvature
Design:	PWP0	Database:	Compass

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,400.0	40.44	0.42	9,327.6	-519.0	166.7	-515.1	10.00	10.00	0.00
9,500.0	50.43	0.42	9,397.7	-447.8	167.2	-444.0	10.00	10.00	0.00
9,600.0	60.43	0.42	9,454.4	-365.6	167.8	-361.8	10.00	10.00	0.00
9,700.0	70.43	0.42	9,495.9	-274.8	168.5	-270.9	10.00	10.00	0.00
9,800.0	80.42	0.42	9,521.0	-178.1	169.2	-174.3	10.00	10.00	0.00
9,895.8	90.00	0.42	9,529.0	-82.8	169.9	-79.0	10.00	10.00	0.00
9,900.0	90.00	0.42	9,529.0	-78.5	169.9	-74.8	0.02	0.00	-0.02
10,000.0	90.00	0.40	9,529.0	21.5	170.7	25.2	0.02	0.00	-0.02
10,100.0	90.00	0.38	9,529.0	121.4	171.3	125.2	0.02	0.00	-0.02
10,200.0	90.00	0.36	9,529.0	221.4	172.0	225.2	0.02	0.00	-0.02
10,300.0	90.00	0.34	9,529.0	321.4	172.6	325.2	0.02	0.00	-0.02
10,400.0	90.00	0.32	9,529.0	421.4	173.2	425.2	0.02	0.00	-0.02
10,500.0	90.00	0.30	9,529.0	521.4	173.7	525.2	0.02	0.00	-0.02
10,600.0	90.00	0.28	9,529.0	621.4	174.2	625.2	0.02	0.00	-0.02
10,700.0	90.00	0.26	9,529.0	721.4	174.7	725.1	0.02	0.00	-0.02
10,800.0	90.00	0.24	9,529.0	821.4	175.2	825.1	0.02	0.00	-0.02
10,900.0	90.00	0.22	9,529.0	921.4	175.6	925.1	0.02	0.00	-0.02
11,000.0	90.00	0.21	9,529.0	1,021.4	175.9	1,025.1	0.02	0.00	-0.02
11,100.0	90.00	0.19	9,529.0	1,121.4	176.3	1,125.1	0.02	0.00	-0.02
11,200.0	90.00	0.17	9,529.0	1,221.4	176.6	1,225.1	0.02	0.00	-0.02
11,300.0	90.00	0.15	9,529.0	1,321.4	176.9	1,325.0	0.02	0.00	-0.02
11,400.0	90.00	0.13	9,529.0	1,421.4	177.1	1,425.0	0.02	0.00	-0.02
11,500.0	90.00	0.11	9,529.0	1,521.4	177.3	1,525.0	0.02	0.00	-0.02
11,600.0	90.00	0.09	9,529.0	1,621.4	177.5	1,625.0	0.02	0.00	-0.02
11,700.0	90.00	0.07	9,529.0	1,721.4	177.6	1,725.0	0.02	0.00	-0.02
11,800.0	90.00	0.05	9,529.0	1,821.4	177.7	1,824.9	0.02	0.00	-0.02
11,900.0	90.00	0.03	9,529.0	1,921.4	177.8	1,924.9	0.02	0.00	-0.02
12,000.0	90.00	0.01	9,529.0	2,021.4	177.8	2,024.9	0.02	0.00	-0.02
12,100.0	90.00	359.99	9,529.0	2,121.4	177.8	2,124.9	0.02	0.00	-0.02
12,200.0	90.00	359.97	9,529.0	2,221.4	177.8	2,224.8	0.02	0.00	-0.02
12,300.0	90.00	359.95	9,529.0	2,321.4	177.7	2,324.8	0.02	0.00	-0.02
12,400.0	90.00	359.93	9,529.0	2,421.4	177.6	2,424.8	0.02	0.00	-0.02
12,500.0	90.00	359.91	9,529.0	2,521.4	177.5	2,524.8	0.02	0.00	-0.02
12,600.0	90.00	359.89	9,529.0	2,621.4	177.3	2,624.7	0.02	0.00	-0.02
12,700.0	90.00	359.88	9,529.0	2,721.4	177.1	2,024.7	0.02	0.00	-0.02
12,800.0	90.00	359.86	9,529.0	2,821.4	176.9	2,824.7	0.02	0.00	-0.02
12,900.0	90.00	359.84	9,529.0	2,921.4	176.6	2,924.6	0.02	0.00	-0.02
13,000.0	90.00	359.82	9,529.0	3,021.4	176.3	3,024.6	0.02	0.00	-0.02
,	00.00		2,02010	-,		2,02.00	0.02	0.00	
13,100.0	90.00	359.80	9,529.0	3,121.4	176.0	3,124.6	0.02	0.00	-0.02
13,200.0	90.00	359.78	9,529.0	3,221.4	175.6	3,224.5	0.02	0.00	-0.02
13,300.0	90.00	359.76	9,529.0	3,321.4	175.2	3,324.5	0.02	0.00	-0.02
13,400.0	90.00	359.74	9,529.0	3,421.4	174.8	3,424.5	0.02	0.00	-0.02
13,499.4	90.00	359.72	9,529.0	3,520.9	174.3	3,523.9	0.02	0.00	-0.02
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Survey Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well JULIET FED COM 114H
Project:	LEA	TVD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
Site:	JULIET FEDERAL COM	MD Reference:	RKB=3468.6 @ 3494.6ft (HP 489)
Well:	JULIET FED COM 114H	North Reference:	True
Wellbore:	JULIET FED COM 114H	Survey Calculation Method:	Minimum Curvature
Design:	PWP0	Database:	Compass

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,500.0	90.00	359.72	9,529.0	3,521.4	174.3	3,524.4	0.00	0.00	0.00
13,600.0	90.00	359.72	9,529.0	3,621.4	173.8	3,624.4	0.00	0.00	0.00
13,700.0	90.00	359.72	9,529.0	3,721.4	173.3	3,724.4	0.00	0.00	0.00
13,800.0	90.00	359.72	9,529.0	3,821.4	172.8	3,824.3	0.00	0.00	0.00
13,900.0	90.00	359.72	9,529.0	3,921.4	172.4	3,924.3	0.00	0.00	0.00
14,000.0	90.00	359.72	9,529.0	4,021.4	171.9	4,024.2	0.00	0.00	0.00
14,100.0	90.00	359.72	9,529.0	4,121.4	171.4	4,124.2	0.00	0.00	0.00
14,200.0	90.00	359.72	9,529.0	4,221.4	170.9	4,224.2	0.00	0.00	0.00
14,300.0	90.00	359.72	9,529.0	4,321.4	170.4	4,324.1	0.00	0.00	0.00
14,400.0	90.00	359.72	9,529.0	4,421.4	169.9	4,424.1	0.00	0.00	0.00
14,500.0	90.00	359.72	9,529.0	4,521.4	169.4	4,524.1	0.00	0.00	0.00
14,600.0	90.00	359.72	9,529.0	4,621.4	168.9	4,624.0	0.00	0.00	0.00
14,700.0	90.00	359.72	9,529.0	4,721.4	168.4	4,724.0	0.00	0.00	0.00
14,800.0	90.00	359.72	9,529.0	4,821.4	167.9	4,824.0	0.00	0.00	0.00
14,900.0	90.00	359.72	9,529.0	4,921.4	167.5	4,923.9	0.00	0.00	0.00
15,000.0	90.00	359.72	9,529.0	5,021.4	167.0	5,023.9	0.00	0.00	0.00
15,100.0	90.00	359.72	9,529.0	5,121.4	166.5	5,123.8	0.00	0.00	0.00
15,200.0	90.00	359.72	9,529.0	5,221.4	166.0	5,223.8	0.00	0.00	0.00
15,300.0	90.00	359.72	9,529.0	5,321.4	165.5	5,323.8	0.00	0.00	0.00
15,400.0	90.00	359.72	9,529.0	5,421.4	165.0	5,423.7	0.00	0.00	0.00
15,500.0	90.00	359.72	9,529.0	5,521.4	164.5	5,523.7	0.00	0.00	0.00
15,600.0	90.00	359.72	9,529.0	5,621.4	164.0	5,623.7	0.00	0.00	0.00
15,700.0	90.00	359.72	9,529.0	5,721.4	163.5	5,723.6	0.00	0.00	0.00
15,800.0	90.00	359.72	9,529.0	5,821.4	163.1	5,823.6	0.00	0.00	0.00
15,900.0	90.00	359.72	9,529.0	5,921.4	162.6	5,923.6	0.00	0.00	0.00
16,000.0	90.00	359.72	9,529.0	6,021.4	162.1	6,023.5	0.00	0.00	0.00
16,100.0	90.00	359.72	9,529.0	6,121.4	161.6	6,123.5	0.00	0.00	0.00
16,200.0	90.00	359.72	9,529.0	6,221.4	161.1	6,223.4	0.00	0.00	0.00
16,300.0	90.00	359.72	9,529.0	6,321.4	160.6	6,323.4	0.00	0.00	0.00
16,400.0	90.00	359.72	9,529.0	6,421.4	160.1	6,423.4	0.00	0.00	0.00
16,500.0	90.00	359.72	9,529.0	6,521.4	159.6	6,523.3	0.00	0.00	0.00
16,600.0	90.00	359.72	9,529.0	6,621.4	159.1	6,623.3	0.00	0.00	0.00
16,700.0	90.00	359.72	9,529.0	6,721.4	158.7	6,723.3	0.00	0.00	0.00
16,800.0	90.00	359.72	9,529.0	6,821.4	158.2	6,823.2	0.00	0.00	0.00
16,900.0	90.00	359.72	9,529.0	6,921.4	157.7	6,923.2	0.00	0.00	0.00
17,000.0	90.00	359.72	9,529.0	7,021.4	157.2	7,023.1	0.00	0.00	0.00
17,042.7	90.00	359.72	9,529.0	7,064.1	157.0	7,065.8	0.00	0.00	0.00

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Survey Report

Company: Project: Site: Well: Wellbore: Design:	JULIET FED COM 114H			TVD Reference: RKB=346 MD Reference: RKB=346 North Reference: True			- imum Curvature		
Design Targets Target Name - hit/miss target Dip Angle Dip Dir. TVD +N/-S +E/-W Northing Easting - Shape (°) (°) (ft) (ft) (ft) (m) (m) Latitude Longitude									
FTP - JULIET FE - plan misses - Circle (radiu	target center by 2	00 0.00 33.2ft at 9448. ⁻	9,529.0 1ft MD (9362	-650.0 8 TVD, -486.		3,562,404.66	645,273.67	32° 11' 19.702 N	103° 27' 32.041 W
LTP/BHL - JULIE - plan hits tar - Circle (radiu	get center	0.00	9,529.0	7,064.1	157.0	3,564,755.62	645,237.77	32° 12' 36.044 N	103° 27' 32.124 W
Checked By:				Approved	d By:			Date:	

Centennial Resource Development New Mexico Multi-Well Pad Drilling Batch Setting Procedures

> Avalon and Bone Springs Formations

<u>13-3/8"</u> Surface Casing - CRD intends to preset 13-3/8" casing to a depth approved in the APD. 17-1/2" Surface Holes will be batch drilled by a Surface Preset rig. Appropriate notifications will be made prior to spudding the well, running and cementing casing and prior to skidding to the rig to the next well on pad.

- 1. Drill 17-1/2" Surface hole to Approved Depth with Surface Preset Rig and perform wellbore cleanup cycles. Trip out and rack back drilling BHA.
- 2. Run and land 13-3/8" 54.5# J55 BTC casing to depth approved in APD.
- 3. Cement 13-3/8" casing with cement to surface and floats holding.
- 4. Cut / Dress 20" Conductor and 13-3/8" casing as needed, weld on Cameron Multi-bowl system with baseplate supported by 20" conductor (see Illustration 1-1 Below). Weld performed per Cameron weld procedure.
- 5. Test Weld to 70% of 13-3/8" casing collapse or ~ 790psi.
- 6. Install nightcap with Pressure Gauge on wellhead. Nightcap is shown on final wellhead Stack up Illustration #2-2 page 3.
- 7. Skid Rig to adjacent well to drill Surface hole.
- 8. Surface casing test will be performed by the Big Rig in order to allow ample time for Cement to develop 500psi compressive strength. Casing test to 0.22 psi/ft or 1500 psi whichever is greater not to exceed 70% casing burst.

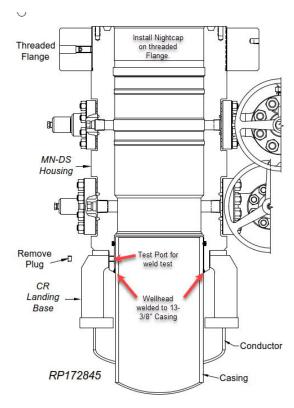


Illustration 1-1

 Intermediate and Production Casing – For all subsequent Intermediate and Production Casing Strings, the Big Rig will remove the nightcap and install and test BOPE. Prior to drill out the 13-3/8" Casing will be tested to 0.22psi/ft or 1500psi whichever is greater. The well will be drilled below 13-3/8" to its intended final TD in the Avalon or Bonesprings formations. Batch drilling will not be executed for casing strings below the 13-3/8". Appropriate notifications will be made prior Testing BOPE, and prior to running/cementing all casing strings. The

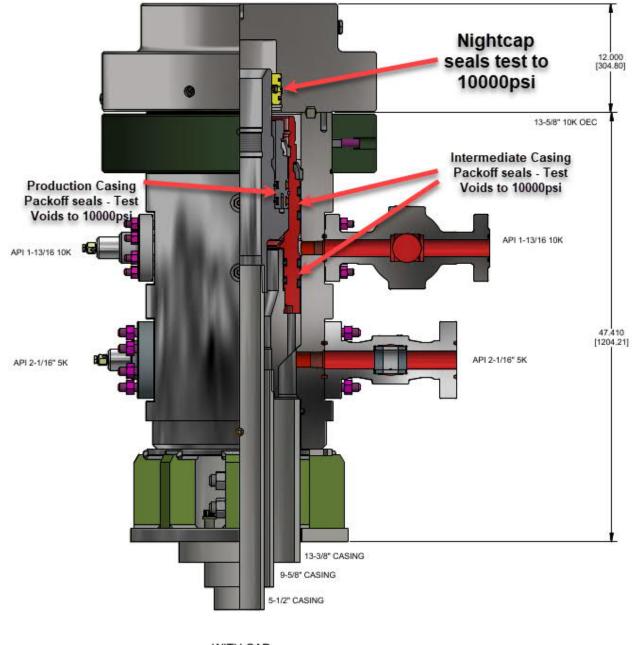
> Wolfcamp Formations

<u>13-3/8" Surface Casing</u> - CRD intends to preset 13-3/8" casing to a depth approved in the APD. Surface Holes will be batch set by a Surface Preset rig. Appropriate notifications will be made prior to spudding the well, running and cementing casing and prior to skidding to the rig to the next well on pad.

- 1. Drill 17-1/2" Surface hole to Approved Depth with Surface Preset Rig and perform wellbore cleanup cycles. Trip out and rack back drilling BHA.
- 2. Run and land 13-3/8" 54.5# J55 BTC casing to depth approved in APD.
- 3. Cement 13-3/8" casing with cement to surface and floats holding.
- 4. Cut / Dress 20" Conductor and 13-3/8" casing as needed, weld on Cameron Multi-bowl system with baseplate supported by 20" conductor (see Illustration 1-1). Weld performed per Cameron weld procedure.
- 5. Test Weld to 70% of 13-3/8" casing collapse or ~ 790psi.
- 6. Install nightcap with Pressure Gauge on wellhead. Nightcap is shown on final wellhead Stack up Illustration #2-2 on page 3.
- 7. Subsequent casing test will be performed by the Big Rig in order to allow ample time for Cement to develop 500psi compressive strength. Casing test to 0.22 psi/ft or 1500 psi whichever is greater not to exceed 70% casing burst.

<u>Intermediate Casing</u> – CRD intends to Batch set all intermediate casing strings to a depth approved in the APD, typically set 100' above KOP in the 3rd Bonesprings Carbonate. For the last intermediate section drilled on pad, the associated production interval will immediately follow. Appropriate notifications will be made prior Testing BOPE, and prior to running/cementing all casing strings.

- 1. Big Rig will remove the nightcap and install and test BOPE.
- 2. Test Surface casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
- 3. Install wear bushing then drill out 13-3/8" shoe-track plus 20' and conduct FIT to minimum of the MW equivalent anticipated to control the formation pressure to the next casing point.
- 4. Drill Intermediate hole to approved casing point. Trip out of hole with BHA to run Casing.
- 5. Remove wear bushing then run and land Intermediate Casing with mandrel hanger in wellhead.
- 6. Cement casing to surface with floats holding.
- 7. Washout stack then run wash tool in wellhead and wash hanger and pack-off setting area.
- 8. Install pack-off and test void to 10000 psi for 15 minutes. Nightcap shown on final wellhead stack up illustration 2-2 on page 3.
- 9. Test casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
- 10. Install nightcap skid rig to adjacent well to drill Intermediate hole.



WITH CAP Illustration 2-2

<u>Production Casing</u> – CRD intends to Batch set all Production casings, except for the last intermediate hole. In this case the production interval will immediately follow the intermediate section on that well. Appropriate notifications will be made prior Testing BOPE, and prior to running/cementing all casing strings.

- 1. Big Rig will remove the nightcap and install and test BOPE.
- 2. Install wear bushing then drill Intermediate shoe-track plus 20' and conduct FIT to minimum MW equivalent to control the formation pressure to TD of well.
- 3. Drill Vertical hole to KOP Trip out for Curve BHA.
- 4. Drill Curve, landing in production interval Trip for Lateral BHA.

- 5. Drill Lateral / Production hole to Permitted BHL, perform cleanup cycles and trip out to run 5-1/2" Production Casing.
- 6. Remove wear bushing then run 5-1/2" production casing to TD landing casing mandrel in wellhead.
- 7. Cement 5-1/2" Production string to surface with floats holding.
- 8. Run in with wash tool and wash wellhead area install pack-off and test void to 10000psi for 15 minutes.
- 9. Install BPV in 5-1/2" mandrel hanger Nipple down BOPE and install nightcap.
- 10. Test nightcap void to 10000psi for 30 minutes per illustration 2-2 page 3.
- 11. Skid rig to adjacent well on pad to drill production hole.

GEOLOGIC PROG

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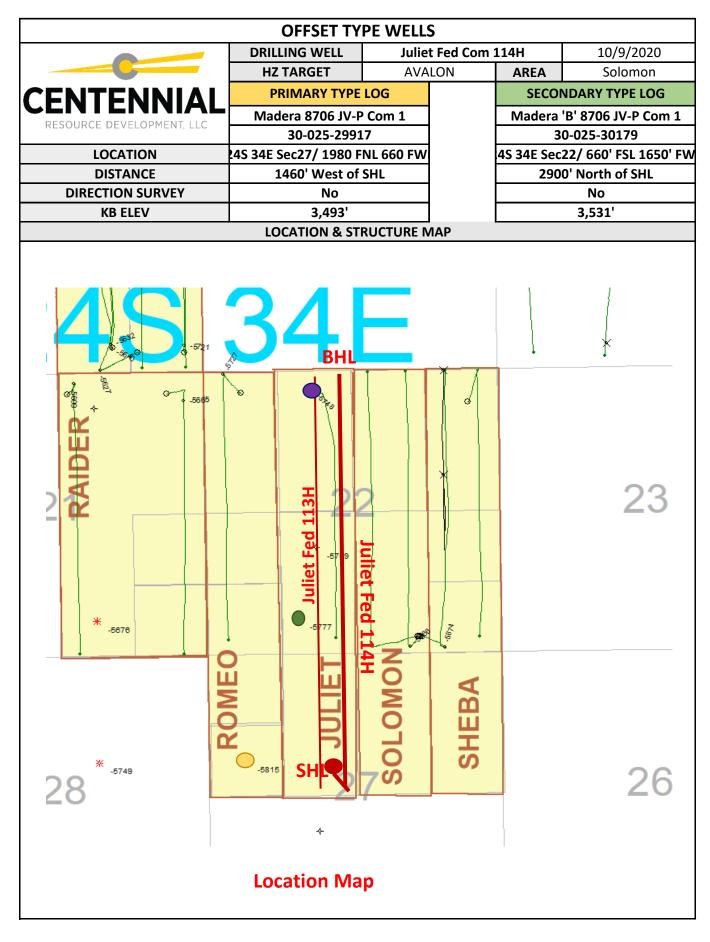
			WELL	NAME	Julie	t Fed Com	114H	10/9/	2020
	-0-		AR	EA	Solo	mon	API		
			HZ TA	RGET	AVALON		WI %		
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RESOURC	E DEVELOPM	ent, llc	TRRC PERMIT		,		COUNTY	Le	a
	TWNP	RNG	SECT		FOOTAGE			COMMENT	
SHL	245	34E		7	1889' FNL		On lease. Drill S to N.		
FTP/PP	245	34E		, 7	2539' FNL 2310' FWL				
LTP	245	34E		2	100' FNL 2310' FWL				
BHL	245	34E		2	100' FNL 2310' FWL				
DITE	245	J4L	GROUN		3,468' RIG KB		26'	KB ELEV	3,494'
GEOLOGIST	Isabel	Harner			@cdevinc.co			03) 589-884	•
LOGG		laipei	150		No open ho			03/ 383-88-	+1
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	D. alla a		4 0021	2 44 21	CA				
	Rustler		1,082'	2,412'					
	Salado		1,701'	1,793'					
BX BLM (I	Fletcher An	hydrite)	3,743'	-249'	,				
	Lamar		5,362'	-1,868'					
	ell Canyon		5,434'	-1,940'					
	erry Canyo		6,334'	-2,840'					
	nzanita Lim		6,552'	-3,058'	1,337'				
	ushy Canyo		7,889'	-4,395'					
Bon	e Spring Lin	ne	9,279'	-5,785'					
	Avalon		9,300'	-5,806'	94				
First B	one Spring	Sand	10,242'	-6,748'					
Second	Bone Spring	g Shale	10,443'	-6,949'	82	26'			
Third B	Sone Spring	Carb	11,269'	-7,775'	54	6'			
Third B	one Spring	Sand	11,815'	-8,321'	38	35'			
1	Wolfcamp		12,200'	-8,706'					
Targ	et Top at O'	VS	9,520'	-6,026'	3	0'			
Targe	et Base at O	' VS	9,550'	-6,056'					
HZ TA	ARGET AT 0	' VS	9,534'	-6,040'					
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Page 6	0 0	f 1	<i>04</i>
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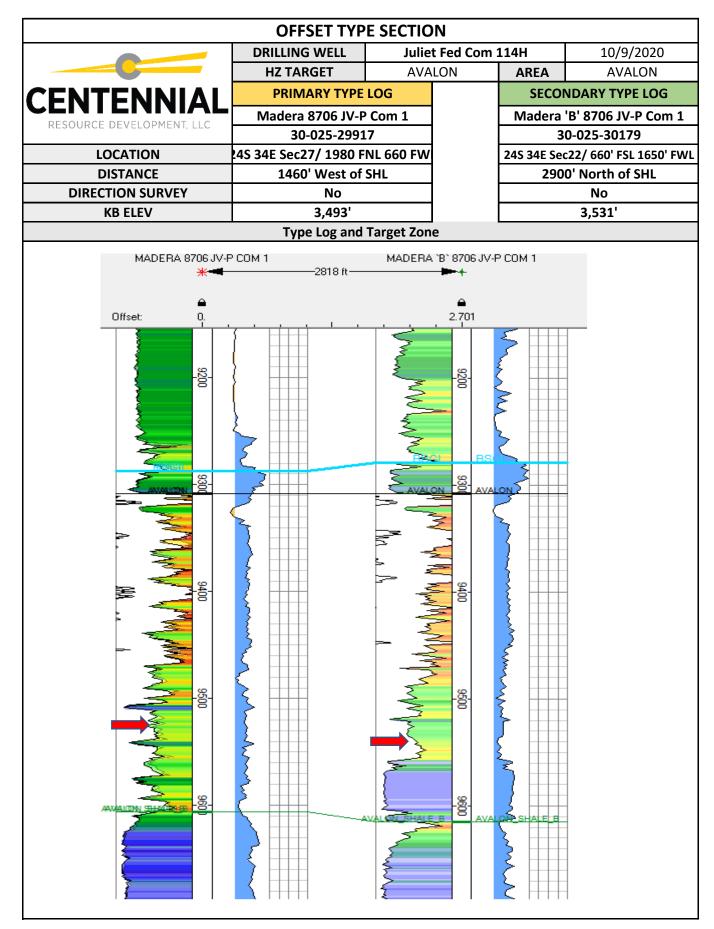
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	DRILLIN	G WELL	Julie	t Fed Com	114H	10/9/	2020
	HZ TA	RGET	AVA	LON	AREA	Solo	mon
ENTENNIAL	PRIM	IARY TYPE	LOG		SECON	DARY TYP	E LOG
	Madera	a 8706 JV-P	Com 1		Madera '	B' 8706 JV-	P Com 1
RESOURCE DEVELOPMENT, LLC	30	0-025-2991	7		30	0-025-3017	9
LOCATION	24S 34E Sec	27/ 1980 FN	L 660 FWL		24S 34E Sec	22/ 660' FSL	1650' FV
DISTANCE	146	0' West of S	5HL		290)' North of	SHL
DIRECTION SURVEY		No				No	
KB ELEV		3,493'				3,531'	
FORMATION	TVD	SSTVD	DELTA		TVD	SSTVD	DELTA
Rustler	1,091'	2,402'	619'		1,161'	2,370'	
Salado	1,710'	1,783'	2,042'		1,778'	1,753'	
BX BLM (Fletcher Anhydrite)	3,752'	-259'	1,619'		3,831'	-300'	1,57
Lamar	5,371'	-1,878'	72'		5,401'	-1,870'	5
Bell Canyon	5,443'	-1,950'	900'		5,456'	-1,925'	91
Cherry Canyon	6,343'	-2,850'	218'		6,371'	-2,840'	21
Manzanita Lime	6,561'	-3,068'	1,337'		6,582'	-3,051'	1,28
Brushy Canyon	7,898'	-4,405'	1,390'		, 7,869'	-4,338'	1,41
Bone Spring Lime	9,288'	-5,795'	21'		9,280'	-5,749'	2
Avalon	9,309'	-5,816'	942'		9,308'	-5,777'	1,01
First Bone Spring Sand	10,251'	-6,758'	201'		10,323'	-6,792'	20
Second Bone Spring Shale	10,452'	-6,959'	826'		10,523'	-6,992'	82
Third Bone Spring Carb	11,278'	-7,785'	546'		11,344'	-7,813'	53
Third Bone Spring Sand	11,824'	-8,331'	385'		11,881'	-8,350'	39
Wolfcamp	12,209'	-8,716'			12,279'	-8,748'	
Reservoir Top	9,529'	-6,036'	30'		9,536'	-6,005'	
Reservoir Base	9,529	-6,036	50		9,530	-6,003	
	5,555	2,000				2,000	

GEOLOGIC PROG



GEOLOGIC PROG



GEOPHYSICAL DATA	
POTENTIAL GEOHAZARDS	
SEISMIC DISPLAYS	

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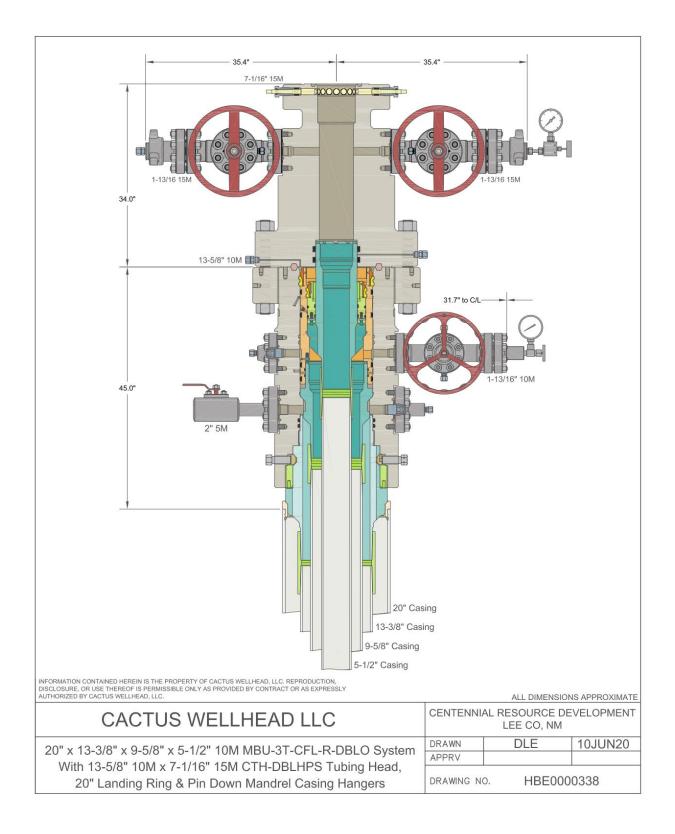
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			NAME		Fed Com	114H	10/9/2020
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		LAT LE	ENGTH	77	00	AFE#	
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GEOLOGIST	Isabel Harper		•	@cdevinc.co	m	(3	03) 589-8841
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6-	TBD		<u></u>				TBD
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				, mex.uam			.Harper@cdevinc.com
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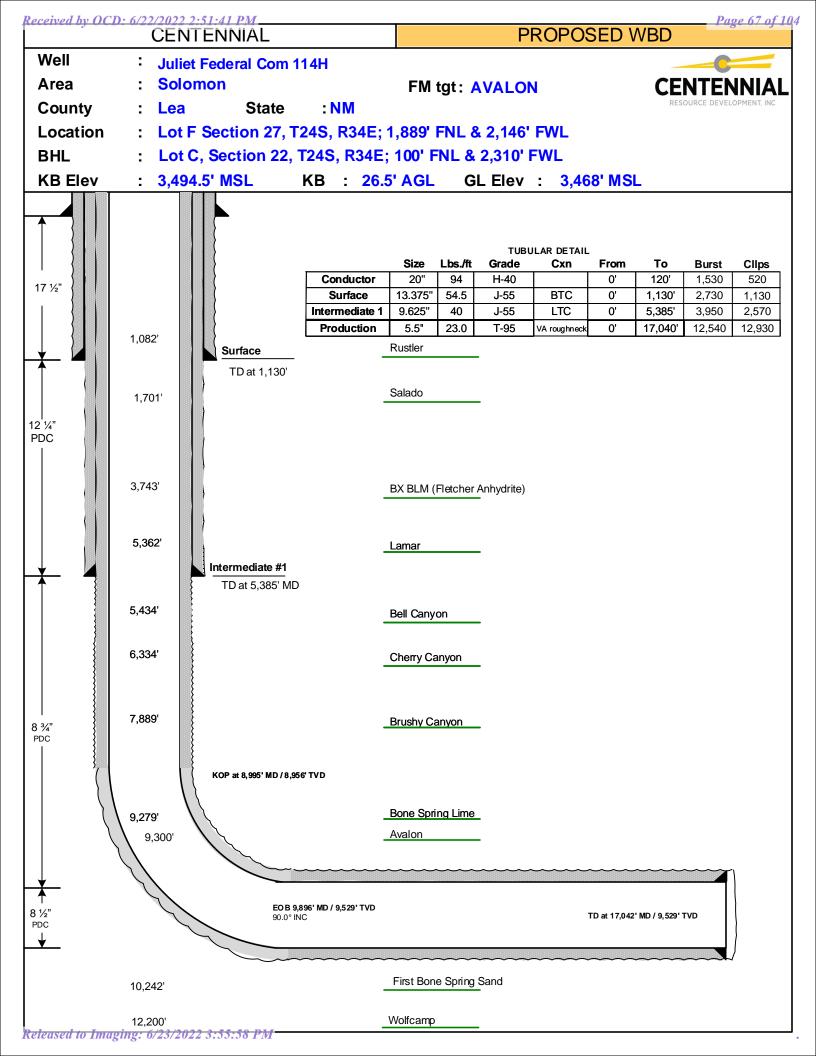
Juliet Fed Com 114H

Centennial Drilling Plan for 3-Casing String - Avalon Formation

13-3/8" x 9-5/8" x 5-1/2" Casing Design

- 1. Drill 17-1/2" surface hole to Total Depth with Spudder Rig and perform wellbore cleanup cycles.
- 2. Run and land 13-3/8" casing to Depth.
- 3. Cement 13-3/8" casing cement to surface.
- 4. Cut / Dress Conductor and 13-3/8" casing as needed, weld on Cactus Multi-bowl system with baseplate supported by 20" conductor.
- 5. Test Weld to 70% of 13-3/8" casing collapse. Place nightcap with Pressure Gauge on wellhead and test seals to 70% of Casing Collapse.
- 6. Bleed Pressure if necessary and remove nightcap. Nipple up and test BOPE with test plug per Onshore Order 2.
- 7. Test casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
- 8. Install wear bushing then drill out 13-3/8" shoe-track plus 20' and conduct FIT to minimum of the MW equivalent anticipated to control the formation pressure to the next casing point.
- 9. Drill 12-1/4" Intermediate hole to 9-5/8" casing point. (Base Capitan Reef).
- 10. Remove wear bushing then run and land 9-5/8" Intermediate Casing with mandrel hanger in wellhead.
- 11. Cement 9-5/8 casing cement to surface.
- 12. Washout stack then run wash tool in wellhead and wash hanger and pack-off setting area.
- 13. Install pack-off and test to 5000 psi for 15 minutes.
 - a. Test casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
- 14. Install wear bushing then drill out 9-5/8" shoe-track plus 20' and conduct FIT to minimum MW equivalent to control the formation pressure to TD of well.
- 15. Drill 8-3/4" Vertical hole to KOP Trip out for Curve BHA.
- 16. Drill 8-3/4" Curve, landing in production interval Trip for Lateral BHA.
- 17. Drill 8-1/2" Lateral to Permitted BHL, perform cleanup cycles and trip out to run 5-1/2" Production Casing.
- Remove wear bushing then run 5-1/2" production casing to TD landing casing mandrel in wellhead.
- 19. Cement 5-1/2" Production string to surface.
- 20. Run in with wash tool and wash wellhead area install pack-off and test to 5000psi for 15 minutes.
- 21. Install BPV in 5-1/2" mandrel hanger Nipple down BOPE and install nightcap.
- 22. Test nightcap void to 5000psi for 30 minutes.





State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 12/16/2020

 \boxtimes Original

Operator & OGRID No.: Centennial Resource Production, LLC 372165

□ Amended - Reason for Amendment:

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Juliet Federal Com 513H	Pending	F-27-24S-34E	2189 FNL & 2111 FWL	1986 MCF/D	Neither	New Well
Juliet Federal Com 514H	Pending	F-27-24S-34E	2189 FNL & 2146 FWL	1950 MCF/D	Neither	New Well
Juliet Federal Com 113H	Pending	F-27-24S-34E	1889 FNL & 2111 FWL	1954 MCF/D	Neither	New Well
Juliet Federal Com 114H	Pending	F-27-24S-34E	1889 FNL & 2146 FWL	1957 MCF/D	Neither	New Well
Juliet Federal Com 312H	Pending	F-27-24S-34E	2039 FNL & 2146 FWL	1981 MCF/D	Neither	New Well
Juliet Federal Com 713H	Pending	F-27-24S-34E	2339 FNL & 2145 FWL	1986 MCF/D	Neither	New Well

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated <u>Lucid Energy Group</u> low/high pressure gathering system located in <u>Lea</u> County, New Mexico. It will require <u>0</u>' of pipeline to connect the facility to low/high pressure gathering system. <u>Centennial Resource Production, LLC</u> provides (periodically) to <u>Lucid Energy Group</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Centennial Resource Production</u>, <u>LLC</u> and <u>Lucid Energy Group</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Red Hills Plant</u> located in Sec. <u>13</u>, Twn. <u>24S</u>, Rng. <u>33E</u>, <u>Lea</u> County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <u>Lucid Energy Group</u> system at that time. Based on current information, it is <u>Centennial Resource Production, LLC</u>'s belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

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Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease

 Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines



ContiTech

CONTITECH RUBBER	No:QC-DB- 210/ 2014				
Industrial Kft.	Page:	9 / 113			

QUA INSPECTION	LITY CON AND TES		ATE	CERT. N	۱ °:	504		
PURCHASER:	ContiTech	Oil & Marine C	orp.	P.O. N°:		4500409659		
CONTITECH RUBBER order N	•: 538236	HOSE TYPE:	3" ID	_L	Choke and	Kill Hose		
HOSE SERIAL Nº:	67255	NOMINAL / ACT	UAL LENGTH	l:	10,67 m / 10,77 m			
W.P. 68,9 MPa 1	0000 psi	T.P. 103,4	MPa 150	00 psi	Duration:	60	min.	
Pressure test with water at ambient temperature \uparrow 10 mm = 10 Min \rightarrow 10 mm = 20 MP		See attachme	ent. (1 pag	e)				
COUPLINGS Ty	be	Serial	N°	Q	uality	Heat N°		
3" coupling wit	ר	9251	9254	AIS	SI 4130	A0579N		
4 1/16" 10K API b.w. Fl	ange end			AIS	SI 4130	035608		
Not Designed I	For Well Te	sting			AF	PI Spec 16 C		
All motol porto pro floud-se					Temp	erature rate:	"B"	
All metal parts are flawless WE CERTIFY THAT THE ABOV					H THE TERMS	OF THE ORDER		
INSPECTED AND PRESSURE T STATEMENT OF CONFORMITY conditions and specifications of accordance with the referenced s	Y: We hereby c the above Purch tandards, codes a	ertify that the above naser Order and the	e items/equipme at these items/ nd meet the rele	ent supplied equipment sevant accept	were fabricated	inspected and tes	ted in	
Date: 20. March 2014.	Inspector		Quality Contr	rol	Contillector J Industria Quality Contr (2)	1 Kft. /	L	

ContiTech Rubber Industrial Kft. | Budapesti út 10. H-6728 Szeged | H-6701 P.O.Box 152 Szeged, Hungary Phone: +36 62 566 737 | Fax: +36 62 566 738 | e-mail: info@fluid.contitech.hu | Internet: www.contitech-rubber.hu; www.contitech.hu The Court of Coopyrad County as Registry Court | Registry Court No: Cg.06-09-002502 | EU VAT No: HU11087209 Released topLinegrad monocare by 22 of 22 000 8-26830003

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

No: 501, 504, 505 Page: 1/1

	e e e e e e e e e e e e e e e e e e e	Have Seed
		Condition Rubber
GN +21.22 90	01:20	Desta Control Dept.
RD +21,55 90 BL +1053, bar	01-20	
- CN + 121-15 90 RD + 21-91 90 RL + 1055 - 64r	01:10 01:10 01:10 01:10	
CN 421 10 00	01:08	
	01:00 01:00 01:00 00:50 00:50	3¢9
	00:50 00:48	
BL +1059. bdr GN +21.38 90	00 40 00 30 00 30	
BL +1061. bdr GN +21.35 9C	00:30	
RD +21.38 9C BL +1064. bor	00:20 00:20 00:20	
0 10 20 30 40	50 60 70 80 9	
19-03-2014-23+50 67252-67255-67256-23		



CONTITECH RUBBER	No:QC-DB- 210/ 2014	
Industrial Kft.	Page:	15 / 113

ContiTech

Hose Data Sheet

CRI Order No.	538236	
Customer	ContiTech Oil & Marine Corp.	
Customer Order No	4500409659	
Item No.	1	
Hose Type	Flexible Hose	
Standard	API SPEC 16 C	
Inside dia in inches	3	
Length	35 ft	
Type of coupling one end	FLANGE 4.1/16" 10K API SPEC 6A TYPE 6BX FLANGE C/W BX155 R.GR.SOUR	
Type of coupling other end	FLANGE 4.1/16" 10K API SPEC 6A TYPE 6BX FLANGE C/W BX155 R.GR.SOUR	
H2S service NACE MR0175	Yes	
Working Pressure	10 000 psi	
Design Pressure	10 000 psi	
Test Pressure	15 000 psi	
Safety Factor	2,25	
Marking	USUAL PHOENIX	
Cover	NOT FIRE RESISTANT	
Outside protection	St.steel outer wrap	
Internal stripwound tube	No	
Lining	OIL + GAS RESISTANT SOUR	
Safety clamp	No	
Lifting collar	No	
Element C	No	
Safety chain	No	
Safety wire rope	No	
Max.design temperature [°C]	100	
Min.design temperature [°C]	-20	
Min. Bend Radius operating [m]	0,90	
Min. Bend Radius storage [m]	0,90	
Electrical continuity	The Hose is electrically continuous	
Type of packing	WOODEN CRATE ISPM-15	

Received by OCD: 6/22/2022 2:51:41 PM

WAFMSS

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Will existing roads be used? YES

Existing Road Map:

JULIET_FEDERAL_COM__113H___Existing_Roads_20201101231331.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Section 1 - Existing Roads

ROW ID(s)

ID:

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:

JULIET_FEDERAL_COM__113H___Proposed_Roads_20201101231408.pdf

New road type: COLLECTOR

Length: 264 Feet Width (ft.): 65

Max slope (%): 2

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Drainage and erosion will be constantly monitored to prevent compromising the road intergrity, and to protect the surrounding native topography. **New road access plan or profile prepared?** N

Max grade (%): 8

New road access plan

APD ID: 10400066751	Submission Date: 12/17/2020	Highlighted data
Operator Name: CENTENNIAL RESOURCE P	PRODUCTION LLC	reflects the most recent changes
Well Name: JULIET FEDERAL COM	Well Number: 114H	Show Final Text
Well Type: OIL WELL	Well Work Type: Drill	



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06/22/2022

SUPO Data Repo

Well Name: JULIET FEDERAL COM

Well Number: 114H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 4

Offsite topsoil source description:

Onsite topsoil removal process: Equipment will be used to strip 4 inches in depth and stockpile, utilizing berms for run-off.

Access other construction information:

Access miscellaneous information: FEE/FED Caliche will be hauled from the existing Basin pit located in the NW/4, Sec 6, T25S, R35E}. Pit has been identified for use in the attached exhibit. Number of access turnouts: Access turnout map:

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: Will be monitored and repaired as necessary.

Road Drainage Control Structures (DCS) description: Drainage and erosion will be constantly monitored to prevent compromising the road intergrity, and to protect the surrounding native topography. **Road Drainage Control Structures (DCS) attachment:**

Access Additional Attachments

Additional Attachment

Juliet_Caliche_Freshwater_Route_20201101233440.pdf

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

JULIET_FEDERAL_COM__113H___Well_Proximity_Map_20201101233535.pdf

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Production facility will be located on the N2 of Sec. 27, T24S-R34E where oil and gas sales will take place. Facility pad is 300' x 500'.

Received by OCD: 6/22/2022 2:51:41 PM	<u> </u>	Page 75 of 1
Operator Name: CENTENNIAL RES		I LLC
Well Name: JULIET FEDERAL COM	1	Well Number: 114H
)
Production Facilities map:		
ROMEO_JULIET_CTB_REV_07_22_	20_20201101234109.p	df
Romeo_Juliet_CTB_Layout1202	01101233618.pdf	
Section 5 - Location a	Ind Types of Wat	er Supply
Water Source Tal	ole	
Water source type: GW WELL		
Water source use type:	STIMULATION	
Source latitude:		Source longitude:
Source datum:		
Water source permit type:	PRIVATE CONTRA	CT CT
Water source transport method:	PIPELINE	
Source land ownership: PRIVATE	E	
Source transportation land owne	ership: PRIVATE	
Water source volume (barrels): 2	25000	Source volume (acre-feet): 29.00094667
Source volume (gal): 9450000		

Water source and transportation

Juliet_Caliche_Freshwater_Route_20201101235057.pdf

Water source comments: Temporary surface lines, 2.35 miles, will be used to transport water for drilling and completion operations from private pit to Juliet development.- Existing freshwater pit in Sec 16-T24S-R34E will be utilized for fresh water and source location for recycled water is tbd. New water well? N

New Water Well I	nfo	
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	9:
Well casing outside diameter (in.):	Well casing insid	de diameter (in.):
New water well casing?	Used casing sou	urce:

Well Name: JULIET FEDERAL COM

Well Number: 114H

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

Using any construction materials: YES

Construction Materials description: Caliche will be hauled from the existing Basin pit located in the NW/4, Sec 6, T25S, R35E}. Pit has been identified for use in the attached exhibit. **Construction Materials source location**

Juliet_Caliche_Freshwater_Route_20201101235256.pdf

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Fresh water based drilling fluid.

Amount of waste: 1500 barrels

Waste disposal frequency : Weekly

Safe containment description: Steel tanks with plastic-lined containment berms

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY

Disposal type description:

Disposal location description: Haul to state approved facility.

Waste type: DRILLING

Waste content description: Brine water based drilling fluid.

Amount of waste: 1500 barrels

Waste disposal frequency : Monthly

Safe containment description: Steel tanks with plastic-lined containment berms.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY Disposal type description:

Disposal location description: Haul to State approved facility.

Well Name: JULIET FEDERAL COM

Well Number: 114H

Waste type: SEWAGE

Waste content description: Grey water/Human waste

Amount of waste: 5000 gallons

Waste disposal frequency : Weekly

Safe containment description: Approved waste storage tanks with containment

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY

Disposal type description:

Disposal location description: Haul to state approve facility.

Waste type: GARBAGE

Waste content description: General trash/garbage

Amount of waste: 5000 pounds

Waste disposal frequency : Weekly

Safe containment description: Enclosed trash trailer.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY Disposal type description:

Disposal location description: Haul to state approved facility.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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? Y

Well Name: JULIET FEDERAL COM

Well Number: 114H

Description of cuttings location 10205 cubic ft of waste, stored in steel tanks. Hauled off to a commercial state approved facility.

Cuttings area length (ft.)

Cuttings area depth (ft.)

Cuttings area width (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

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

JULIET_FEDERAL_COM__113H___Location_Layout_20201102001041.pdf JULIET_FEDERAL_COM__113H___Rig_Layout_20201102001054.pdf Comments: FEE/FEE/FED

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: JULIET FED 27 SENW

Multiple Well Pad Number: 1

Recontouring

JULIET_FEDERAL_COM__113H___Reclamation_plat_20201102001145.pdf

Drainage/Erosion control construction: Culverts will be installed on an as needed basis.

Drainage/Erosion control reclamation: Water breaks will be added if needed, to prevent unnatural erosion and loss of vegetation.

Received by OCD: 6/22/2022 2:51:41 PM		Page 79 of 104
Operator Name: CENTENNIAL RESOL	JRCE PRODUCTION LLC	
Well Name: JULIET FEDERAL COM	Well Number: 114	ł
Well pad proposed disturbance (acres): 11.696 Road proposed disturbance (acres):	Well pad interim reclamation (acres): 6.328 Road interim reclamation (acres): 0	Well pad long term disturbance (acres): 5.368 Road long term disturbance (acres):
0.393 Powerline proposed disturbance (acres): 0	Powerline interim reclamation (acres):	(acres): 0
Pipeline proposed disturbance (acres): 0.103 Other proposed disturbance (acres): 0	Pipeline interim reclamation (acres): 0 Other interim reclamation (acres): 0	Arres): 0.103 Other long term disturbance (acres): 0
Total proposed disturbance: 12.192	Total interim reclamation: 6.328	Total long term disturbance: 5.864

Disturbance Comments:

Reconstruction method: This pad will not be reclaimed as it is a drill island.

Topsoil redistribution: Topsoil will be stock piled along the north fill slope and south edge of the borrow area. Topsoil along the south edge of borrow area will be redistributed over the borrow area at this is a drill island and will not be reclaimed.

Soil treatment: Native soil will be used in the initial construction of the well pad. Pad will be compacted using fresh water, dust control measures will be implemented as needed.

Existing Vegetation at the well pad: Surface disturbance will be limited to well site surveyed and extending south to borrow deficit quantities. Topsoil will be stored along the north edge of pad site and south edge of borrow area.

Existing Vegetation at the well pad

Existing Vegetation Community at the road: Will be windrowed to the edge of the disturbance and be utilized as a barrier from water run-off.

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: Will be windrowed to the edge of the disturbance and be utilized as a barrier from water run-off.

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: Will be windrowed to the edge of the disturbance and be utilized as a barrier from water run-off. **Existing Vegetation Community at other disturbances**

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Received by OCD: 6/22/2022 2:51:41 PM

	rator Name: CENTENNIA Name: JULIET FEDERA		ICTION LLC Well Number: 17	14H
	Seed Seed Table			
	Seed Su	ımmary	Total pounds/Acre:	
	Seed Type	Pounds/Acre		
Seed	reclamation			
	Operator Co	ntact/Responsibl	e Official	
Firs	st Name:		Last Name:	
Pho	one:		Email:	
Seed Existi Existi Weed Weed Monif	method: Broadcast ing invasive species? N ing invasive species tre ing invasive species tre treatment plan descrip treatment plan coring plan description:	atment description: atment tion: Spray for noxious All disturbed areas will b	weeds and bare ground a be closely monitored for a	establishment of native vegetation. as needed. any primary or secondary noxious weeds.
stand	•			egetation will be returned to its native
Pit cl	osure attachment: Section 11 - S	urface		
Distu	rbance type: WELL PAD			
Desc	ribe:			
Surfa	ce Owner: PRIVATE OW	/NERSHIP		
Other	surface owner descrip	tion:		

BIA Local Office:

BOR Local Office:

•

Well Name: JULIET FEDERAL COM

Well Number: 114H

- **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:

Fee Owner: Quail Ranch, LLC	Fee Owner Address: One Concho Center, 600 West Illinois
Phone: (432)853-2355	Ave. Email: jwood@concho.com
Surface use plan certification: YES	
Surface use plan certification document:	
Surface access agreement or bond: AGREEMEN	IT
Surface Access Agreement Need description: B	ook 2144 Page 514
Surface Access Bond BLM or Forest Service:	

- BLM Surface Access Bond number:
- USFS Surface access bond number:

Section 12 - Other

Right of Way needed? N ROW Type(s): Use APD as ROW?

ROW

SUPO Additional Information: Onsite not required. FEE/FED Use a previously conducted onsite? N Well Name: JULIET FEDERAL COM

Well Number: 114H

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Previous Onsite information:

Other SUPO

Juliet_Fed_Com_113H__114H__312H__513H__514H__713H_SUPO_20201102010339.pdf

JULIET FEDERAL COM 113H, 114H, 312H, 513H, 514H 713H

SURFACE USE PLAN

EXISTING ROADS (ROAD PLAT ATTACHED AS PLAT #1)

 The operator will improve or maintain existing road 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. We 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 the dust suppression chemicals on roadways.

DRIVING DIRECTIONS (ATTACHED AS PLAT #2)

PROCEED IN A WESTERLY, THEN NORTHWESTERLY, THEN WESTERLY DIRECTION FROM JAL, NEW MEXICO ALONG NM-128 APPROXIMATELY 18.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE BEGINNING OF THE PROPOSED ROMEO FEDERAL COM 311H, 312H, 111H & 112H ACCESS ROAD TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY DIRECTION APPROXIMATELY 1813' TO THE BEGINNING OF THE PROPOSED ACCESS ROAD "A" TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 132' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM JAL, NEW MEXICO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 19.6 MILES.

NEW OR RECONSTRUCTED ACCESS ROADS (ATTACHED AS PLAT #3) (CONTRUCTION)

- There will be approximately 263.51' of new road construction for the well pad and facilities.
- Road Width: The access roads shall have a driving surface that creates the smallest possible surface disturbance and does not exceed 65'. (see "Access Road ROW" plat attached)
- Maximum Grade: 3% Actual .68%
- Crown Design: Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2%. The road shall conform to cross section and plans for typical road construction found in the BLM Gold Book.
- Ditch Design: Ditching will be constructed on both sides of road.
- Cattle guards: None suggested.
- Major Cuts and Fills: 2:1 during drilling and completions.
- Type of surfacing Material: Caliche.

LOCATION OF EXISTING WELLS (DIAGRAM & SPREADSHEET ATTACHED AS PLAT #4)

- 1-mile radius map and well details attached.

LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES (WORK AREA DETAIL MAP ATTACHED AS PLAT #5)

- FACILITIES:
 - Production facility will be located on the N2 of Sec. 27, T24S-R34E
 where oil and gas sales will take place.
 - Oil and gas sales pipelines will be built to the north side of the facility pad.
 - Open vent exhaust stacks will be modified to prevent birds or bats from entering, discourage perching, roosting and nesting.
 - Facility will have a secondary containment at least 1.5 times the holding capacity of largest storage tank.

- All above ground structures will be painted non-reflective shale green for blending with the environment.
- The tank battery will be connected to the existing water gathering system in the field for permanent water disposal.

LOCATION OF PROPOSED ROW (WELL PLAT ATTACHED AS PLAT #6)

- Pipelines: 1 buried SWD pipeline <12 ¾" OD , approximately 1,475′, will be laid from facility in section 27, going north to an existing SWD line in the SW4 of section 22-T24S-R34E.
 - A ROW will be required for these pipelines.
 - All construction activity will be confined to the approved ROW.
 - Pipeline will stay within approved ROW.
- Powerlines: A powerline, will be installed from the well location to an existing Centennial takepoint tbd within section 22-T24S-R34E.
- Powerline will continue from the facility pad to each of the drill pads located in the N2 of section 27-T24S-R34E.
 - A ROW will be required for all OHE line.
 - All construction activity will be confined to the approved ROW.
 - Powerline will run parallel to the road and will stay within approved ROW.

LOCATION AND TYPES OF WATER (PLAT ATTACHED AS PLAT #7)

- Existing freshwater pit in Sec 16-T24S-R34E will be utilized for fresh water and source location for recycled water is tbd.
- Fresh water will be obtained from a private water source.
- Temporary expanding water surface line will be used to transport water for drilling and completion operations from the pipeline to the Juliet location along existing road a total of approx. 11,575' from the well location to the existing frac pond in Sec 16-T24S-R34E.
 - Fresh water line will run parallel to the existing road, then north within an existing pipeline right of way.

CONSTRUCTION MATERIAL (ATTACHED AS PLAT #8)

- Caliche will be hauled from the existing Basin pit located in the NW/4, Sec 6, T25S, R35E}. Pit has been identified for use in the attached exhibit.
- Any native caliche on the proposed site can be used by "flipping" the location and using all native soils.
 - Notification shall be given to BLM at 575/234-5909 at least 2 working days prior to commencing construction of access road and /or well pad.

METHODS FOR HANDLING WASTE (CONSTRUCTION)

- Drilling fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility.
- Garbage and trash produced during drilling and completion operations will be collected in a 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.
- Human waste and grey water will be properly contained and disposed of properly at a state approve disposal facility.
- 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.
- The well will be drilled utilizing a closed loop system. Drill cuttings will be properly disposed of into steel tank and taken to an NMOCD approved disposal facility.

ANCILLARY FACILITIES

- None

WELL SITE LAYOUT (WELL SITE PLAT ATTACHED AS PLAT #9) (CONSTRUCTION)

- Well Site Plat
 - Exterior well pad dimensions are 850' x 535'.
 - Interior well pad dimensions from point of entry (well head) of the westernmost well are N-200', S-650', W-260', E-275'. The length to the east includes 30' spacing for next well on multi-well

pad (six wells). Total disturbance area needed for construction of well pad will be 12.192 acres.

 Topsoil placement is on the south where interim reclamation is planned to be completed upon completion of well and evaluation of best management practices.

PROPOSED PAD CUT & FILL (PLAT ATTACHED AS PLAT #10)

- Cut and fill: will be minimal.

RIG LAYOUT (ATTACHED AS PLAT #11)

PLANS FOR SURFACE RECLAMATION (RECLAMATION PLAT ATTACHED AS PLAT #12)

RECLAMATION OBJECTIVES

- The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil; control erosion; and minimize habitat and forage loss, visual impact, and weed infestation, during the life of the well or facilities.
- 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.
- The BLM will be notified at least 3 days prior to commencement of any reclamation procedures.
- IF CIRCUMSTANCES ALLOW, INTERIM RECLAMATION AND/OR FINAL RECLAMATION ACTIONS WILL BE COMPLETED. WE WILL GAIN WRITTEN PERMISSION FROM THE BLM IF MORE TIME IS NEEDED.

RECLAMATION WILL BE PERFORMED BY USING THE FOLLOWING PROCEDURES:

INTERIM RECLAMATION PROCEDURES

- Within 6 months, Centennial will contact BLM Surface Management Specialists to devise the best strategies to reduce the size of the location. Current plans for interim reclamation include reducing the pad size to approximately 3.989 acres from the proposed size of 4.870 acres. the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not require for production. A plan will be submitted showing where interim reclamation will be completed to allow for safe operations, protection of the environment outside of drilled well, and following best Management practices found in the BLM "Gold Book".
- 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.
- The areas planned for interim reclamation will then be recontoured 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 res-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Notice: Constructed slopes may be much steeper during drilling but will be recontoured to the above ratios during interim reclamation.
- Topsoil will be evenly re-spread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture (BLM#2), free of noxious weeds, will be used.
- Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.
- The interim reclamation will be monitored periodically to ensure that vegetation has reestablished.

Final Reclamation (well pad, buried pipelines, and powerlines, etc.)

- Prior to final reclamation procedures, the well pad, road and surrounding area will be cleared of material, trash, and equipment.

- All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.
- All disturbed areas, including roads, pipelines, pads, production facilities and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends in distinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.
- After all the disturbed areas have been properly prepared; the areas will be seeded with the proper BLM see mixture (BLM #2), free of noxious weeds.
- Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding areas.

SURFACE OWNERSHIP

- Well pad and all other infrastructure is on Fee Surface (Quail Ranch)

OTHER INFORMATION (PLATS ATTACHED AS PLAT 13)

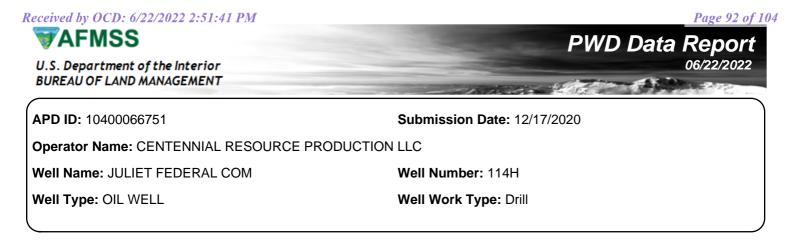
- On-site not required. FEE/FEE/FED.
- Erosion / Drainage: Drainage control system shall be constructed on the entire length of road using any of the following: ditches, side hill outsloping and in-sloping, lead-off ditched, culvert installation, or low water crossings.
- Enclosure fencing will be installed around open cellar to prevent livestock or large wildlife from being trapped after installation, or low water crossings.
- Enclosure fencing will be installed around open cellar to prevent livestock or large wildlife from being trapped after installation. Fencing will remain in place while no activity is present and until backfilling takes place.
- Terrain: Landscape is flat
- Soil: Sandy loam
- Vegetation: Vegetation present in surrounding area includes mesquite, shrubs, and grass (needle-grass, burro grass, dropseed).

- Wildlife: No wildlife observed, but it is likely that deer, rabbits, coyotes and rodents pass through the area.
- Surface Water: No surface water concerns.
- Cave Karst: Low Karst area with no cave or visual signs of caves found.
- Watershed Protection: The entire perimeter of the well pad will be bermed to prevent oil, salt and other chemical contaminates from leaving the well pad.

Received by OCD: 6/22/2022 2:51:41 PM CENTENNIAL RESOURCE PRODUCTION, LLC JULIET FEDERAL COM 113H, 114H, 312H, 513H, 514H & 713H SECTION 27, T24S, R34E, N.M.P.M. LEA COUNTY, NEW MEXICO

DATE:	DESCRIPTION:
9/13/2019	COMPLETE PLAT PACKAGE
9/24/2019	UPDATED DISTURBANCE ACREAGE
1/13/2020	FTP/PP CHANGES
2/18/2020	ADDED RECLAMATION PLAT
7/13/2020	SHL & NAME CHANGES (C-102S ONLY)
7/17/2020	PAD MOVE, NAME CHANGES, ROAD RE-ROUTES & ADD FLOW LINE R-O-W
8/11/2020	CORRECTED COUNTY ON RIGHT-OF-WAY PLATS





Section 1 - General

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

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N Produced Water Disposal (PWD) Location: PWD surface owner: Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit Pit liner description: **Pit liner manufacturers** Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule Lined pit reclamation description: Lined pit reclamation Leak detection system description: Leak detection system

PWD disturbance (acres):

Well Name: JULIET FEDERAL COM

Well Number: 114H

Lined pit Monitor description: Lined pit Monitor

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

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres):

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

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

Beneficial use user

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

State

Unlined Produced Water Pit Estimated

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

Well Name: JULIET FEDERAL COM

Well Number: 114H

PWD disturbance (acres):

Injection well name:

Injection well API number:

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information

Section 4 -

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

PWD surface owner:

Injection well number:

Assigned injection well API number?

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection

Underground Injection Control (UIC) Permit?

UIC Permit

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

 Produced Water Disposal (PWD) Location:

 PWD surface owner:
 PWD disturbance (acres):

 Surface discharge PWD discharge volume (bbl/day):
 PWD disturbance (acres):

 Surface Discharge NPDES Permit?
 Surface Discharge NPDES Permit attachment:

 Surface Discharge site facilities information:
 Surface discharge site facilities map:

 Section 6 Section 6

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

Other PWD discharge volume (bbl/day):

PWD disturbance (acres):

Well Name: JULIET FEDERAL COM

Well Number: 114H

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements

06/22/2022

AFMSS

APD ID: 10400066751

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Submission Date: 12/17/2020

and the second

Operator Name: CENTENNIAL RESOURCE PRODUCTION LLC

Well Name: JULIET FEDERAL COM Well Type: OIL WELL Well Number: 114H Well Work Type: Drill Highlighted data reflects the most recent changes <u>Show Final Text</u>

Bond Info Data

Bond

Federal/Indian APD: FED

BLM Bond number: NMB001841

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:

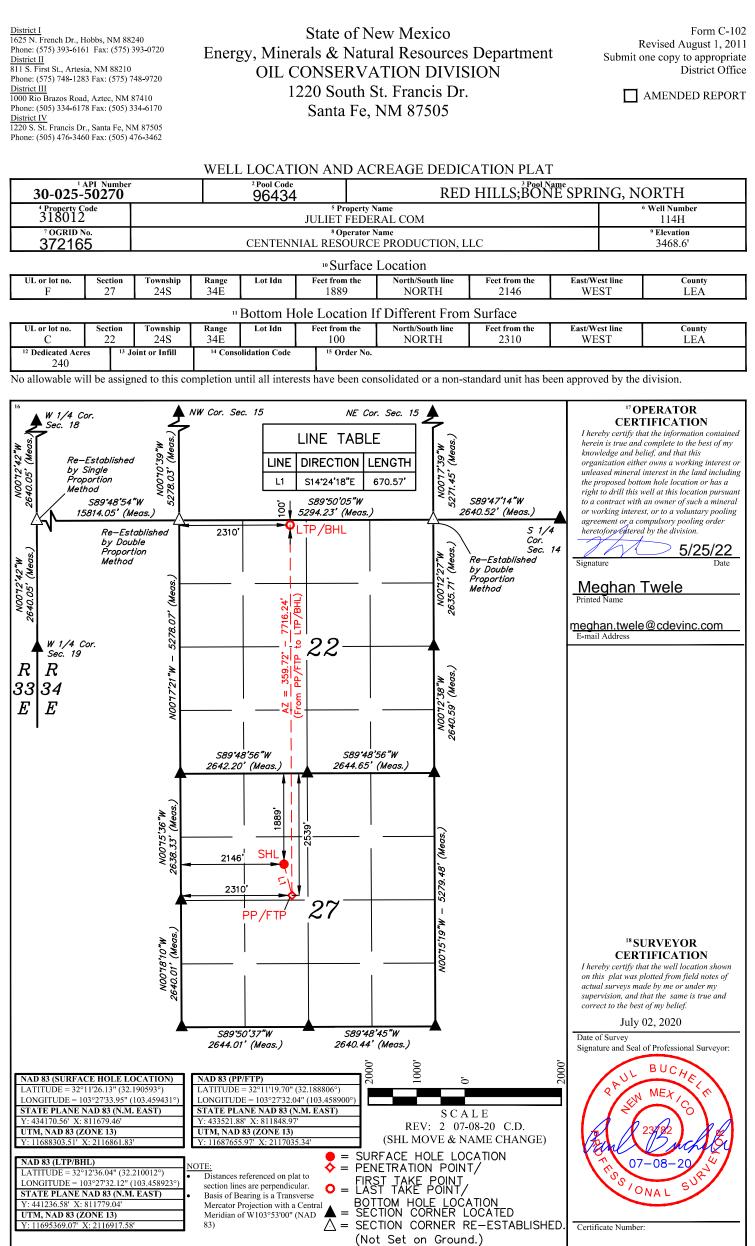
Forest Service reclamation bond

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information



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Released to Imaging: 6/23/2022 3:55:58 PM

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	En	Stat ergy, Minerals a	e of New Mex nd Natural Res		ent		Subr Via l	nit Electronically E-permitting
	Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505							
	NA	ATURAL GA	AS MANA(GEMENT P	LAN			
This Natural Gas Mana	agement Plan mu	st be submitted wi	th each Applicat	ion for Permit to I	Drill (A	PD) for a n	ew of	recompleted well.
			<u>1 – Plan De</u> fective May 25,					
I. Operator: <u>Center</u>	nnial Resourc	ce Prod, LLC	OGRID: <u>37</u>	/2165		Date: _	4 /	<u>5 /2022</u>
II. Type: Original	□ Amendment d	lue to □ 19.15.27.	9.D(6)(a) NMA	C 🗆 19.15.27.9.D	(6)(b) N	IMAC 🗆 C	ther.	
If Other, please describ	e:							
III. Well(s): Provide the recompleted from a					wells pi	roposed to	be dri	lled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D			Anticipated roduced Water BBL/D	
Juliet Fed Com 113H		F-27-24S-34E	2109FNL&2111FW	1800 BBL/D			2,240 BBL/D	
Juliet Fed Com 114H	30-025-50270	F-27-24S-34E F-27-24S-34E	2109FNL&2146FW 2149FNL&2146FW			MCF/D MCF/D		2,240 BBL/D
Juliet Fed Com 312H IV. Central Delivery I V. Anticipated Schedu		Raider 502/503/7	01 CDP			[See 19	0.15.2	8,000BBL/D 7.9(D)(1) NMAC] osed to be drilled on
proposed to be recomp	leted from a sing	le well pad or con	nected to a centr	al delivery point.				
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		Initial F Back D		First Production Date
luliet Fed Com 113H		9/12/2023	9/20/2023	11/16/2023		12/18/202	23	12/18/2023
uliet Fed Com 114H	30-025-50270	9/12/2023	9/20/2023	11/16/2023		12/18/202	23	12/18/2023
		8/8/2022	8/16/2022	12/8/2022		12/31/202	22	12/31/2022
Juliet Fed Com 113H Juliet Fed Com 114H Juliet Fed Com 312H VI. Separation Equip VII. Operational Pra Subsection A through I VIII. Best Manageme during active and planr	ment: ■ Attach ctices: ■ Attach F of 19.15.27.8 N ent Practices: ■	9/12/2023 8/8/2022 a complete descrip a complete descr MAC.	9/20/2023 9/20/2023 8/16/2022 otion of how Ope	11/16/2023 11/16/2023 12/8/2022 erator will size sep tions Operator wil	aration l take t	12/18/202 12/18/202 12/31/202 equipment o comply v	23 23 22 to op with t	12/18/2023 12/18/2023 12/31/2022 timize gas captur he requirements

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Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

• Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. \Box Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system \Box will \Box will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator \Box does \Box does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

□ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: \Box Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

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<u>Section 3 - Certifications</u> <u>Effective May 25, 2021</u>

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

■ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

 \Box Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. *If Operator checks this box, Operator will select one of the following:*

Well Shut-In. \Box Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. \Box Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:

Stewart MacCallum

Printed Name: Stewart MacCallum

Title: Director of Marketing

E-mail Address: Stewart.MacCallum@cdevinc.com

Date: 5/23/2022

Phone: (720) 499-1458

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:

Title:

Approval Date:

Conditions of Approval:

Centennial Resource Production, LLC (372165)

Natural Gas Management Plan Descriptions

VI. Separation Equipment:

Centennial utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations. Our goal is to maintain 5 minutes of retention time in the test vessel and 20 minutes in the heater treater at peak production rates. The gas produced is routed from the separator to the gas sales line.

VII. Operational Practices:

Drilling

During Centennial's drilling operations it is uncommon for venting or flaring to occur. If flaring is needed due to safety concerns, gas will be routed to a flare and volumes will be estimated.

Flowback

During completion/recompletion flowback operations, after separation flowback begins and as soon as it is technically feasible, Centennial routes gas though a permanent separator and the controlled facility where the gas is either sold or flared through a high-pressure flare if needed.

Production

Per 19.15.27.8.D, Centennial's facilities are designed to minimize waste. Our produced gas will only be vented or flared in an emergency or malfunction situation, except as allowed for normal operations noted in 19.15.27.8.D(2) & (4). All gas that is flared is metered. All gas that may be vented will be estimated.

Performance Standards

Centennial utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations.

All of Centennial's permanent storage tanks associated with production operations which are routed to a flare or control device are equipped with an automatic gauging system.

All of Centennial's flare stacks, both currently installed and for future installation, are:

- 1) Appropriately sized and designed to ensure proper combustion efficiency.
- 2) Equipped with an automatic ignitor or continuous pilot.
- 3) Anchored and located at least 100 feet from the well and storage tanks.

Centennial's field operations and HSE teams have implemented an AVO inspection schedule that adheres to the requirements of 19.15.27.8.E(5).

All of our operations and facilities are designed to minimize waste. We routinely employ the following methods and practices:

- Closed-loop systems
- Enclosed and properly sized tanks

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- Vapor recovery units to maximize recovery of low-pressure gas streams and potential unauthorized emissions
- Low-emitting or electric engines whenever practical
- Combustors and flare stacks in the event of a malfunction or emergency
- Routine facility inspections to identify leaking components, functioning control devices, such as flares and combustors, and repair / replacement of malfunctioning components where applicable

Measurement or estimation

Centennial measures or estimates the volumes of natural gas vented, flared and/or beneficially used for all of our drilling, completing and producing wells. We utilize accepted industry standards and methodology which can be independently verified. Annual GOR testing is completed on our wells and will be submitted as required by the OCD. None of our equipment is designed to allow diversion around metering elements except during inspection, maintenance and repair operations.

VIII. Best Management Practices:

Centennial utilizes the following BMPs to minimize venting during active and planned maintenance activities:

- Use a closed-loop process wherever possible during planned maintenance activities, such as blowdowns, liquid removal, and work over operations.
- Employ low-emitting or electric engines for equipment, such as compressors
- Adhere to a strict preventative maintenance program which includes routine facility inspections, identification of component malfunctions, and repairing or replacing components such as hatches, seals, valves, etc. where applicable
- Utilize vapor recovery units (VRU's) to maximize recovery of volumes of low-pressure gas streams and potential unauthorized emissions
- Route low pressure gas and emissions streams to a combustion device to prevent venting where necessary

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

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

District III

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

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator:	OGRID:
CENTENNIAL RESOURCE PRODUCTION, LLC	372165
1001 17th Street, Suite 1800	Action Number:
Denver, CO 80202	119665
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	6/23/2022
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	6/23/2022
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	6/23/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	6/23/2022

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Action 119665