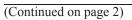
Form 3160-3 (June 2015) UNITED STATES		FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018					
DEPARTMENT OF THE IN		-		5. Lease Serial No. NMNM114998			
BUREAU OF LAND MANA APPLICATION FOR PERMIT TO DE				6. If Indian, Allotee	or Tribe 1	Name	
AFFLICATION FOR FERMIT TO DE				o. II Indian, / motee		vunie	
la. Type of work: 🖌 DRILL RE	ENTI	ER		7. If Unit or CA Agreement, Name and No.			
1b. Type of Well: ✓ Oil Well Gas Well Oth	her						
Ic. Type of Completion: Hydraulic Fracturing Single Zone Multiple Zone				8. Lease Name and Well No. SIOUX 25-36 STATE FED COM			
		32648					
				21H			
2. Name of Operator CAZA OPERATING LLC [249099]				9. API Well No.	30-	025-50392	
3a. Address	3b. P	hone No. (include area code		10. Field and Pool, o	1	5	
200 N. Loraine Street, Suite 1550, Midland , TX 79701	682-7424		WC-025 G-08 S25	35340; E	BONE SPRING		
4. Location of Well (<i>Report location clearly and in accordance with any State requirements.*</i>)				11. Sec., T. R. M. or SEC 25/T20S/R35		Survey or Area	
At surface NWNE / 93 FNL / 1389 FEL / LAT 32.108387				SEC 23/1203/R33			
At proposed prod. zone SWSE / 20 FSL / 1850 FEL / LAT		796235 / LONG -103.318	6959				
14. Distance in miles and direction from nearest town or post office*7 miles				12. County or Parish LEA	1	13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. N	lo of acres in lease	17. Spacir 320.0	ig Unit dedicated to the	his well		
18. Distance from proposed location*	19. P	roposed Depth	20. BLM/	BIA Bond No. in file			
to nearest well, drilling, completed, applied for, on this lease, ft. 60 feet	9904	feet / 20244 feet	FED: NN	MB000471			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		pproximate date work will s	tart*	23. Estimated duration			
3090 feet		9/2021		32 days			
		Attachments					
The following, completed in accordance with the requirements of (as applicable)	Onsh	ore Oil and Gas Order No. 1,	, and the H	Iydraulic Fracturing r	ule per 43	CFR 3162.3-3	
 Well plat certified by a registered surveyor. A Drilling Plan. 		Item 20 above).	-	s unless covered by ar	n existing	bond on file (see	
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office)				mation and/or plans as	may be re	equested by the	
25. Signature (Electronic Submission)		Name (Printed/Typed) STEVE MORRIS / Ph: (4	32) 682-7	7424	Date 05/19/2	021	
Title							
Engineer Approved by (Signature)		Nama (Printed/Tuned)			Date		
(Electronic Submission)		Name (Printed/Typed) Cody Layton / Ph: (575) 2	234-5959		09/21/2	021	
Title Assistant Field Manager Lands & Minerals		Office Carlsbad Field Office			1		
Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached.	holds	s legal or equitable title to the	ose rights	in the subject lease w	hich wou	d entitle the	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, ma of the United States any false, fictitious or fraudulent statements of					iny depar	tment or agency	

NGMP Rec 06/24/2022

SL







INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 93 FNL / 1389 FEL / TWSP: 20S / RANGE: 35E / SECTION: 25 / LAT: 32.1083878 / LONG: -103.3172073 (TVD: 0 feet, MD: 0 feet) PPP: NWNE / 0 FNL / 1850 FEL / TWSP: 20S / RANGE: 35E / SECTION: 36 / LAT: 32.093876 / LONG: -103.318794 (TVD: 9904 feet, MD: 15000 feet) PPP: NWNE / 100 FNL / 1850 FEL / TWSP: 20S / RANGE: 35E / SECTION: 25 / LAT: 32.1803603 / LONG: -103.318696 (TVD: 9803 feet, MD: 9905 feet) BHL: SWSE / 20 FSL / 1850 FEL / TWSP: 20S / RANGE: 35E / SECTION: 36 / LAT: 32.0796235 / LONG: -103.3186959 (TVD: 9904 feet, MD: 20244 feet)

BLM Point of Contact

Name: Priscilla Perez Title: Legal Instruments Examiner Phone: (575) 234-5934 Email: pperez@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CAZA OPERATING LLC
WELL NAME & NO.:	Sioux 25-36 State Fed Com 21H
LOCATION:	SECTION 25, T25S, R35E, NMPM
COUNTY:	LEA

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	C Multibowl	OBoth
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 **20** inch conductor casing shall be set at approximately 120 feet and cemented to the surface.
- 2. The **13-3/8** inch surface casing shall be set at approximately 1100 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 $\underline{8}$

hours 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.
- 3. 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.
 - In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **50 feet** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.

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 **10,000 (10M)** psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 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 Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, 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,

Page 3 of 8

(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.

- Wait on cement (WOC) for Potash Areas: 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</u> <u>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.
- 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.

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

Approval Date: 09/21/2021

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

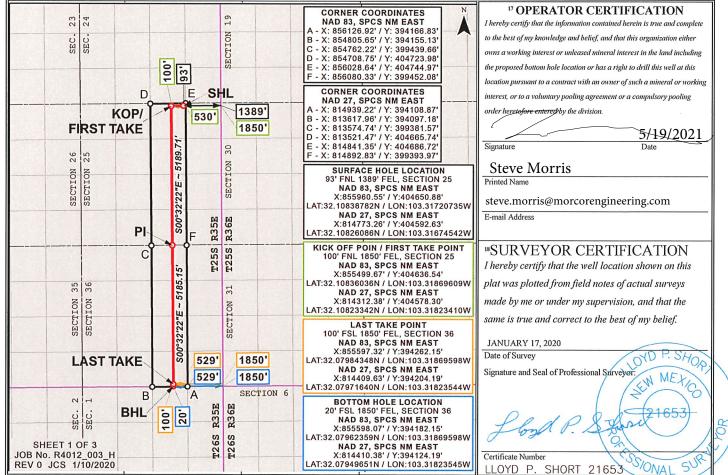
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

AMENDED REPORT

	WELL LOCATION AND ACREAGE DEDICATION PLAT											
	PI Number				² Pool C	ode			³ Pool N	ame		
30-025	-50392				9708	38		WC-025 C	G-08 S253534	40; BOI	NE SPRING	
⁴ Property C	Code	⁵ Property Name									⁶ Well Number	
326483		SIOUX 25-36 STATE FED COM 21H									21H	
⁷ OGRID N	No.					⁸ Op	erator N	lame				⁹ Elevation
24909	9	CAZA OPERATING LLC 3090'								3090'		
	¹⁰ Surface Location											
UL or lot no.	Section	Township)	Range							County	
В	25	25S		35E		93		NORTH	1389	EAS	ST	LEA
				пBo	ttom H	lole Locati	on If	Different From	n Surface			
UL or lot no.	Section	Township		Range	Lot I	dn Feet fr	om the	North/South line	Feet from the	Eas	/West line	County
0	36	25S		35E		20		SOUTH	1850	EAS	ST	LEA
¹² Dedicated Acres	¹³ Joint of	r Infill	14 Conse	olidation	dation Code ¹⁵ Order No.							
320.0												

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



Distances/areas relative to NAD 83 Combined Scale Factor: 0.99987673 Convergence: 00°32'19.77000'

District I

Released to Imaging: 7/28/2022 3:08:59 PM

Received by OCD: 6/24/2022 9:	12:19	AM
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	nergy, Minerals an Oil Co 1220 S	nservation Di outh St. Fran	ources Departme vision cis Dr.	ent	Sub Via	mit Electronically E-permitting					
N	1220 S	outh St. Fran	cis Dr.								
N	Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505										
	ATURAL GA	AS MANA(GEMENT PI	LAN							
ent Plan mı	1st be submitted wi	th each Applicat	tion for Permit to I	Drill (API	D) for a new o	or recompleted we					
rating LL	С	OGRID:	49099		Date: 6	17 / 2022					
mendment	due to □ 19.15.27.	9.D(6)(a) NMA	C □ 19.15.27.9.D(6)(b) NM	IAC □ Other						
				vells prop	posed to be di	rilled or proposed					
		entral derivery p	onn.								
API	ULSTR	Footages	Anticipated Oil BBL/D	Antici Gas M		Anticipated Produced Water BBL/D					
API 025-50392	ULSTR B-25-25S-35E		Anticipated		CF/D	Produced Water					
)25-50392		Footages 93FNL 1389FEL	Anticipated Oil BBL/D 750	Gas M	00	Produced Water BBL/D					
25-50392 t Name: S Provide the	B-25-25S-35E	Footages 93FNL 1389FEL State Fed	Anticipated Oil BBL/D 750 CTB	Gas M	CF/D	Produced Water BBL/D 800 27.9(D)(1) NMAC					
25-50392 t Name: S Provide the	B-25-25S-35E	Footages 93FNL 1389FEL State Fed	Anticipated Oil BBL/D 750 CTB	Gas M	CF/D	Produced Water BBL/D 800 27.9(D)(1) NMAC					
1	mendment	Eff rating LLC mendment due to \Box 19.15.27.	Effective May 25,	mendment due to 19.15.27.9.D(6)(a) NMAC 19.15.27.9.D(Effective May 25, 2021 rating LLC OGRID: 249099 mendment due to [] 19.15.27.9.D(6)(a) NMAC [] 19.15.27.9.D(6)(b) NM	Effective May 25, 2021 cating LLC OGRID: 249099 Date: 6 mendment due to [] 19.15.27.9.D(6)(a) NMAC [] 19.15.27.9.D(6)(b) NMAC [] Other					

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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.

X 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.

Section 3 - Certifications Effective May 25, 2021

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

 $\overline{\mathbf{x}}$ 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.

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:
Printed Name: Steve Morris
Title: Engineer
E-mail Address: steve.morris@morcorengineering.com
Date: 06/17/2022
Phone: 985-415-9729
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Approved By: Title:
Title:
Title: Approval Date:
Title: Approval Date:

Natural Gas Management Plan Items VI-VIII

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release gas from the well.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

Drilling Operations

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

Production Operations

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All plunger lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.

Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 Mcfd.

Measurement & Estimation

- All volume that is flared and vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses with be installed.

• When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- During downhole well maintenance, Caza will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
 All valves upstream of the equipment will be closed and isolated.
- After equipment has been isolated, the equipment will be blown down to as low a pressure as possible into the collection system.
- If the equipment being maintained cannot be relieved into the collection system, it shall be released to a tank where the vapor can either be captured or combusted if possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.

WAFMSS

Application for Permit to Drill

APD Package Report

APD ID: 10400066301 APD Received Date: 05/19/2021 02:01 AM Operator: CAZA OPERATING LLC

APD Package Report Contents

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
 - -- Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
 - -- Blowout Prevention Choke Diagram Attachment: 3 file(s)
 - -- Blowout Prevention BOP Diagram Attachment: 3 file(s)
 - -- Casing Design Assumptions and Worksheet(s): 3 file(s)
 - -- Hydrogen sulfide drilling operations plan: 1 file(s)
 - -- Proposed horizontal/directional/multi-lateral plan submission: 1 file(s)
 - -- Other Facets: 4 file(s)
 - -- Other Variances: 1 file(s)
- SUPO Report
- SUPO Attachments
 - -- Existing Road Map: 1 file(s)
 - -- Attach Well map: 1 file(s)
 - -- Production Facilities map: 1 file(s)
 - -- Water source and transportation map: 1 file(s)
 - -- Well Site Layout Diagram: 3 file(s)
 - -- Surface use plan certification document: 1 file(s)
 - -- Other SUPO Attachment: 6 file(s)
- PWD Report
- PWD Attachments
 - -- None
- Bond Report

10-10-12 (50-17) - 1-20

U.S. Department of the Interior

Bureau of Land Management

Date Printed: 09/21/2021 03:24 PM

Well Status: AAPD Well Name: SIOUX 25-36 STATE FED CO Well Number: 21H - Bond Attachments -- None

Form 3160-3 June 2015) UNITED STATES DEPARTMENT OF THE INTERIOR						APPROV o. 1004-0 nuary 31	137
DEPARTMENT OF THE IN					5. Lease Serial No.		
BUREAU OF LAND MANA	-				NMNM114998	or Tribo	Nama
APPLICATION FOR PERMIT TO DR	ILL	OR REEP	IIER		6. If Indian, Allotee	or tribe	Name
1a. Type of work: 🔽 DRILL REE	ENTE	ER			7. If Unit or CA Ag	reement, 1	Name and No.
1b. Type of Well: ✓ Oil Well Gas Well Other							
1c. Type of Completion: Hydraulic Fracturing Image: Single Singl	8. Lease Name and Well No. SIOUX 25-36 STATE FED COM						
2. Name of Operator CAZA OPERATING LLC					21H 9. API Well No.		
		hone No. <i>(incl</i>) 682-7424	ude area cod	le)	10. Field and Pool, WC-025 G-08 S25		•
4. Location of Well <i>(Report location clearly and in accordance with</i> At surface NWNE / 93 FNL / 1389 FEL / LAT 32.108387 At proposed prod. zone SWSE / 20 FSL / 1850 FEL / LAT	11. Sec., T. R. M. of SEC 25/T20S/R35		Survey or Area				
14. Distance in miles and direction from nearest town or post office* 7 miles					12. County or Paris LEA	h	13. State NM
					ng Unit dedicated to t	his well	
18. Distance from proposed location* to nearest well, drilling, completed,		roposed Depth feet / 20244			//BIA Bond No. in file MB000471		
		.pproximate da 9/2021	te work will	start*	23. Estimated duration 32 days		
	24.	Attachment	5		1		
The following, completed in accordance with the requirements of C (as applicable)	Onsho	ore Oil and Ga	s Order No. 1	l, and the F	Iydraulic Fracturing r	ule per 43	3 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 System SUPO must be filed with the appropriate Forest Service Office). 		Iter ds, the 5. Op 6. Suc	n 20 above). erator certific h other site sj	cation.	is unless covered by an mation and/or plans as	0	X
25. Signature Name (Printed/Typed) (Electronic Submission) STEVE MORRIS / Ph: (432) 682-				432) 682-	7424	Date 05/19/2	2021
Title	1						
Engineer Approved by (Signature) (Electronic Submission)		Name (Printe Cody Layton		234-5959		Date 09/21/2	2021
(Electronic Submission) Cody Layton / Ph: (575) 234-595 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office						1	
Application approval does not warrant or certify that the applicant l applicant to conduct operations thereon. Conditions of approval, if any, are attached.	holds	legal or equit	able title to the tot	hose rights	in the subject lease w	hich wou	ld entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, mal of the United States any false, fictitious or fraudulent statements or						any depar	tment or agency



(Continued on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 93 FNL / 1389 FEL / TWSP: 20S / RANGE: 35E / SECTION: 25 / LAT: 32.1083878 / LONG: -103.3172073 (TVD: 0 feet, MD: 0 feet) PPP: NWNE / 0 FNL / 1850 FEL / TWSP: 20S / RANGE: 35E / SECTION: 36 / LAT: 32.093876 / LONG: -103.318794 (TVD: 9904 feet, MD: 15000 feet) PPP: NWNE / 100 FNL / 1850 FEL / TWSP: 20S / RANGE: 35E / SECTION: 25 / LAT: 32.1803603 / LONG: -103.318696 (TVD: 9803 feet, MD: 9905 feet) BHL: SWSE / 20 FSL / 1850 FEL / TWSP: 20S / RANGE: 35E / SECTION: 36 / LAT: 32.0796235 / LONG: -103.3186959 (TVD: 9904 feet, MD: 20244 feet)

BLM Point of Contact

Name: Priscilla Perez Title: Legal Instruments Examiner Phone: (575) 234-5934 Email: pperez@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CAZA OPERATING LLC
WELL NAME & NO.:	Sioux 25-36 State Fed Com 21H
LOCATION:	SECTION 25, T25S, R35E, NMPM
COUNTY:	LEA

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	C Multibowl	OBoth
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 **20** inch conductor casing shall be set at approximately 120 feet and cemented to the surface.
- 2. The **13-3/8** inch surface casing shall be set at approximately 1100 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 $\underline{8}$

hours 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.
- 3. 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.
 - In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **50 feet** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.

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 **10,000 (10M)** psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 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 Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, 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,

Page 3 of 8

(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.

- Wait on cement (WOC) for Potash Areas: 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</u> <u>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.
- 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.

Approval Date: 09/21/2021



Email address:

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

Operator Certification Data Report

09/21/2021

Operator Certification

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

NAME: STEVE MORE	राS	Signed on: 05/19/2021								
Title: Engineer										
Street Address: 1410)2 WCR 173									
City: ODESSA	State: TX	Zip: 79766								
Phone: (985)415-972	9									
Email address: steve	.morris@morcorengineering.com									
Email address: steve.morris@morcorengineering.com Field Representative Representative Name:										
Representative Name	e:									
Street Address:										
City:	State:	Zip:								
Phone:										

Received by OCD: 6/24/2022 9:12:19 AM

AFMSS

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

APD ID: 10400066301

Operator Name: CAZA OPERATING LLC Well Name: SIOUX 25-36 STATE FED COM Well Type: OIL WELL

Submission Date: 05/19/2021

Well Number: 21H

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General		
APD ID: 10400066301	Tie to previous NOS?	Submission Date: 05/19/2021
BLM Office: Carlsbad	User: STEVE MORRIS	Title: Engineer
Federal/Indian APD: FED	Is the first lease penetrated	for production Federal or Indian? FED
Lease number: NMNM114998	Lease Acres:	
Surface access agreement in place?	Allotted?	Reservation:

Federal or Indian agreement:

APD Operator: CAZA OPERATING LLC

Agreement number: Agreement name:

Keep application confidential? Y

Permitting Agent? YES

Agreement in place? NO

Operator letter of designation:

Operator Info

Operator Organization Name: CAZA	OPERATING LLC	
Operator Address: 200 N. Loraine S	treet, Suite 1550	7 i
Operator PO Box:		21
Operator City: Midland	State: TX	
Operator Phone: (432)682-7424		

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: SIOUX 25-36 STATE FED COM Well API Number: Well Number: 21H Field/Pool or Exploratory? Field and Pool Field Name: WC-025 G-08 Pool Name: WC-025 G-08 S2535340; BONE SPRING S253534O: BONE SPRING

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

ip: 79701

Page 35 of 125

Application Data Report

Well Work Type: Drill

09/21/2021

Received by OCD: 6/24/2022 9:12:19 AM

Well Number: 21H

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

Is the proposed well in a Helium production area? N Use Existing Well Pad? Y New surface disturbance? N Type of Well Pad: MULTIPLE WELL Multiple Well Pad Name: Sioux Number: 8H 25-36 State Fed Com Well Class: HORIZONTAL Number of Legs: 1 Well Work Type: Drill Well Type: OIL WELL **Describe Well Type:** Well sub-Type: EVALUATION **Describe sub-type:** Distance to lease line: 93 FT Distance to town: 7 Miles Distance to nearest well: 60 FT Reservoir well spacing assigned acres Measurement: 320 Acres Well plat: Sioux_25_36_State_Fed_Com_21H___C_102_signed_20210519004843.pdf Well work start Date: 12/09/2021 Duration: 32 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number: R4012_003_H

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	DM	TVD	Will this well produce from this lease?
SHL	93	FNL		FEL	20S	35E	25	Aliquot	32.10838		LEA	NEW			NMNM		0	0	Y
Leg			9					NWNE	78	103.3172			MEXI		114998	0			
#1										073		со	CO						
KOP	100	FNL	185	FEL	20S	35E	25	Aliquot	32.10836	-	LEA	NEW	NEW	F	NMNM	-	942	938	Y
Leg			0					NWNE	03	103.3186			MEXI		114998	629	0	6	
#1										96		со	CO			6			
PPP	100	FNL	185	FEL	20S	35E	25	Aliquot	32.18036	-	LEA	NEW	NEW	F	NMNM	-	990	980	Y
Leg			0					NWNE	03	103.3186		MEXI	MEXI		114998	671	5	3	
#1-1										96		со	со			3			

Page 2 of 3

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

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 lease?
PPP	0	FNL	185	FEL	20S	35E	36	Aliquot	32.09387	-	LEA	1	NEW	s	STATE	-	150	990	Y
Leg			0					NWNE	6	103.3187			MEXI			681	00	4	
#1-2										94		со	со			4			
EXIT	100	FSL	185	FEL	20S	35E	36	Aliquot	32.07984	-	LEA	NEW	NEW	S	STATE	-	201	990	Y
Leg			0					SWSE	34	106.3186			MEXI			681	64	4	
#1										959		со	CO			4			
BHL	20	FSL	185	FEL	20S	35E	36	Aliquot	32.07962	-	LEA	NEW	NEW	S	STATE	-	202	990	Y
Leg			0					SWSE	35	103.3186			MEXI			681	44	4	
#1										959		co	со			4			

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District III 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

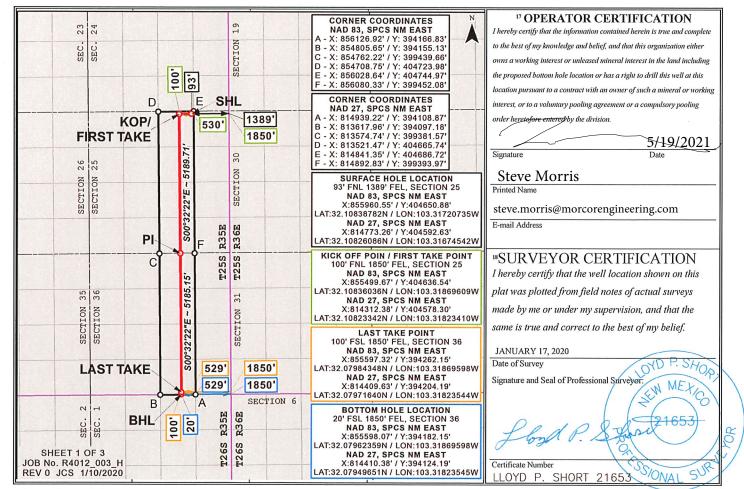
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

AMENDED REPORT

	WELL LOCATION AND ACREAGE DEDICATION PLAT											
¹ A	PI Number	r			² Pool Co	ode			³ Pool	Name		
		97088 WC-025 G-08 S253534O; BOI										RING
⁴ Property C	Code				⁶ \	Well Number						
317657					21H							
⁷ OGRID N	No.					⁸ Op	erator N	ame				⁹ Elevation
24909	9		CAZA OPERATING LLC									
						10 Surf	àce L	ocation				
UL or lot no.	Section	Township	p	Range	Lot Io	dn Feet fr	om the	North/South line	e Feet from th	ie Eas	t/West line	County
В	25	258	5] 1	35E		93		NORTH	1389	EA	ST	LEA
				пBo	ttom H	lole Locati	on If	Different From	m Surface			
UL or lot no.	Section	Township	p	Range	Lot Io	dn Feet fr	om the	North/South line	Feet from the	ie Eas	t/West line	County
0	36	258	25S 35E 20 SOUTH 1850 EAST LE									
¹² Dedicated Acres	¹³ Joint of	r Infill	14 Cons	olidation	Code 15	Order No.						
320.0												

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



Distances/areas relative to NAD 83 Combined Scale Factor: 0.99987673 Convergence: 00°32'19.77000'

District I



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

APD ID: 10400066301

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Type: OIL WELL

Submission Date: 05/19/2021

Well Number: 21H Well Work Type: Drill Highlighted data reflects the most recent changes

09/21/2021

Drilling Plan Data Report

Show Final Text

Section 1 - Geologic Formations

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
4122674		3090	0	0	ALLUVIUM	NONE	N
4122675	RUSTLER	2181	909	909	ANHYDRITE	USEABLE WATER	N
4122676	TOP SALT	1753	1337	1337	SALT	NONE	N
4122677	TANSILL	-141	3231	3245	ANHYDRITE, DOLOMITE	NONE	N
4122678	YATES	-272	3362	3377	ANHYDRITE, DOLOMITE	NONE	N
4122679	SEVEN RIVERS	-462	3552	3569	ANHYDRITE, DOLOMITE	NONE	N
4122680	QUEEN	-688	3778	3797	ANHYDRITE, DOLOMITE	NONE	N
4122681	GRAYBURG	-1064	4154	4177	ANHYDRITE, DOLOMITE	NONE	N
4122682	SAN ANDRES	-1512	4602	4629	ANHYDRITE, DOLOMITE	NONE	N
4122683	DELAWARE	-1906	4996	5027	CONGLOMERATE, LIMESTONE, SANDSTONE	NONE	N
4122684	CHERRY CANYON	-2678	5768	5807	CONGLOMERATE, LIMESTONE, SANDSTONE	NONE	N
4122685	BRUSHY CANYON	-4191	7281	7335	CONGLOMERATE, LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
4122686	BRUSHY CANYON LOWER	-5167	8257	8320	CONGLOMERATE, LIMESTONE, SANDSTONE	NONE	N
4122687	BONE SPRING	-5406	8496	8561	LIMESTONE, SANDSTONE	NONE	N
4122688	BONE SPRING 1ST	-6690	9780	9846	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Received by OCD: 6/24/2022 9:12:19 AM

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Page 40 of 125

Pressure Rating (PSI): 10M

Rating Depth: 15000

Equipment: Rotating head with a rating of 500psi will be used. A remote kill line and gas buster will be used

Requesting Variance? YES

Variance request: Variance is requested for the use of a coflex hose for the choke line to from the BOP to the choke manifold. A variance is requested to use 1502(15,000psi working pressure) hammer unions downstream of the Choke Manifold used to connect the mud/gas separator and panic line. See choke manifold diagram. Variance is requested to use a 5M Annular. Well Control Plan is attached.

Testing Procedure: Minimum Working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13-3/8 inch casing shoe shall be 5000 (5M) psi. 5M 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. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests. 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 pug. BOP/BOPE testing can begin after cut-off or once cement reaches 500PSI 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). 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 (18 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). a. The results of the test shall be reported to the appropriate BLM office. b. 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. c. 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.

Choke Diagram Attachment:

Sioux_25_36_State_Fed_Com_21H	_Coflex_Hyd_Test_Cert_20210519005634.pdf
Sioux_25_36_State_Fed_Com_21H	_10M_Choke_Schematic_20210519005634.pdf
Sioux_25_36_State_Fed_Com_21H	_Coflex_Hose_Test_Chart_20210519005639.pdf

BOP Diagram Attachment:

Sioux_25_36_State_Fed_Com_21H___10M_BOP_Schematic_20210519005654.pdf

Sioux_25_36_State_Fed_Com_21H___Multi_Bowl_Wellhead_20210519005654.pdf

Sioux_25_36_State_Fed_Com_21H___Well_Control_20210519005700.pdf

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCT OR	26	20.0	NEW	API	N	0	120	0	120	3090	2970	120	H-40	94	ST&C						
2	SURFACE	17.5	13.375	NEW	API	N	0	1100	0	1100	3090	1990	1100	J-55	54.5	ST&C	2.22	1.06	DRY	8.57	DRY	8.57
	INTERMED IATE	9.62 5	9.625	NEW	API	N	0	4970	0	4970	3090	-1880	4970	HCL -80	40	BUTT	1.64	1.18	DRY	4.61	DRY	4.61
	PRODUCTI ON	8.75	6.0	NEW	API	N	0	20244	0	9904	3090	-6814	20244	P- 110	23.5	BUTT	2.34	2.63	DRY	3.31	DRY	3.31

Casing Attachments

Casing ID: 1

String Type: CONDUCTOR

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Received by OCD: 6/24/2022 9:12:19 AM

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Casing Attachments

Casing ID: 2 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

SIOUX_25_36_STATE_FED_COM_21H___Casing_and_Cement_Design_20210519014802.pdf

Casing ID: 3 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

SIOUX_25_36_STATE_FED_COM_21H__Casing_and_Cement_Design_20210519014904.pdf

Casing ID: 4 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 ${\tt SIOUX_25_36_STATE_FED_COM_21H__Casing_and_Cement_Design_20210519015000.pdf}$

Section 4 - Cement

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead		0	120	105	1.35	14.8	140	5	Class C	CaCl2

L	-1 1	1	1						I	
SURFACE	Lead	0	800	577	1.93	13.5	1114	100	Class C	4% bwoc Bentonite II + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005% bwoc Static Free + 0.005 gps FP- 6L
SURFACE	Tail	800	1100	309	1.35	14.8	417	100	Class C	CaCl2
INTERMEDIATE	Lead	0	4470	1370	2.13	12.6	2918	100	Class C	(35:65) + Poz (Fly Ash) + 4% bwoc Bentonite II + 5% bwoc MPA-5 + 0.25% bwoc FL-52 + 5 Ibs/sack LCM- 1 + 0.125 Ibs/sack Cello Flake + 0.005 Ibs/sack Static Free + 0.005 gps FP-6L + 1.2% bwoc Sodium Metasilicate + 5% bwow Sodium Chloride
INTERMEDIATE	Tail	4470	4970	260	1.35	14.8	307	100	Class C	CaCl2
PRODUCTION	Lead	0	9800	1560	2.38	11.5	3713	100	Class H	(50:50) + Poz (Fly Ash) + 10% bwoc Bentonite II + 5% bwow Sodium Chloride + 5 lbs/sack LCM-1 + 0.005 lbs/sack Static Free + 0.005 gps FP-6L
PRODUCTION	Tail	9800	2024 4	2860	1.62	13.5	4633	100	Class H	(15:61:11) Poz (Fly Ash):Class H Cement:CSE-2 + 4% Sodium Chloride + 3 Ibs/sack LCM-1 + 0.6% bwoc FL-25 + FP-6L + 0.005% bwoc Static Free

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

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 mud will be on location to control any abnormal conditions encountered. Such as but not limited to a kick, lost circulation and hole sloughing.

Describe the mud monitoring system utilized: A Pason PVT system will be rigged up prior to spudding the well. A volume monitoring system that measures, calculates, and displays readings from the mud system on the rig to alert the rig crew of impending gas kicks and lost circulation issues. Components a) PVT Pit Bull monitor: Acts as the heart of the system, containing all the controls, switches, and alarms. Typically, it is mounted near the driller's console. b) Junction box: Provides a safe, convenient place for making the wiring connections. c) Mud probes: Measure the volume of drilling fluid in each individual tank. d) Flow sensor: Measures the relative amount of mud flowing in the return line.

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
120	1100	SPUD MUD	8.4	8.9	62	0.1	9.5	2	0	0	
1100	4970	SALT SATURATED	9.2	10	75	0.1	9.5	2	150000	0	
4970	2024 4	OIL-BASED MUD	9	9.5	72	0.4	9.5	6	135000	18	

Received by OCD: 6/24/2022 9:12:19 AM

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Section 6 - Test, Logging, Coring

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

none

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

GAMMA RAY LOG, DIRECTIONAL SURVEY, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

none

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4888

Anticipated Surface Pressure: 2709

Anticipated Bottom Hole Temperature(F): 155

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Sioux_25_36_State_Fed_Com_21H___H2S_Plan_20210519005231.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Sioux_25_36_State_Fed_Com_21H___Well_Plan_20210519020048.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Sioux_25_36_State_Fed_Com_21H___Closed_Loop_Diagram_Design_Plan_20210519005109.pdf

Sioux_25_36_State_Fed_Com_21H___Closed_Loop_Design_Operating_and_Closure_Plan_20210519005109.pdf

Sioux_25_36_State_Fed_Com_21H___Gas_Capture_Plan_20210519005110.pdf

Sioux_14_15_16_17_20_21_22_23___Reciept_20210519005137.pdf

Other Variance attachment:

Sioux_25_36_State_Fed_Com_21H___Multi_Bowl_Wellhead_20210519005052.pdf



Page 47 of 125

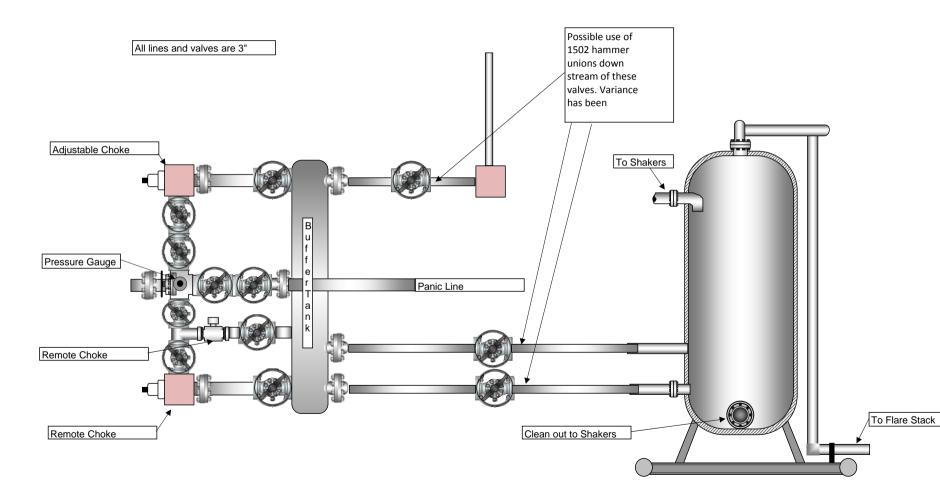
Received by OCD: 6/24/2022 9:12:19 AM

. 1

Customer:	HWD		Customer P.O. N RIGI4 9211	
	HOSE SPEC	FICATIONS		
Type: Rotary / V D	ibrator Hose / API 7K		Hose Length:	173 IN
I.D.	INCHES	0.D.	5.87 IA	ICHES
WORKING PRESSURE	TEST PRESSU	RE 15,000 PSI	BURST PRESSURE	PSI
Part Number E4.0X64WB E4.0X64WB	Stem Lot Nu 2Q11	PLINGS mber ILOT1 ILOT1	Ferrule Lot Nu NQ745 NQ745	nber
Type of Coupling:		Die Size:		£3
Swage-	łt		6.38 INCHES	
	PROC	EDURE		
	ly pressure tested w I TEST PRESSURE	*	<u>ni lemperature</u> . BURST PRESSURE:	
11 1/4			NA	PSI
Hose Assembly Ser 170980		Hose Serial I	Number: 8268	
Comments:				
Dete:	Tosted:		Approved:	
9/21/2012	13. 188	Same Sug	Bin Show	Δ

Released to Imaging: 7/28/2022 3:08:59 PM

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JAO

3-22-00 5-21- REV-2

DATE

WITNESSED BY:

November 20, 2006

3 MIN. @ 15,000 PSI

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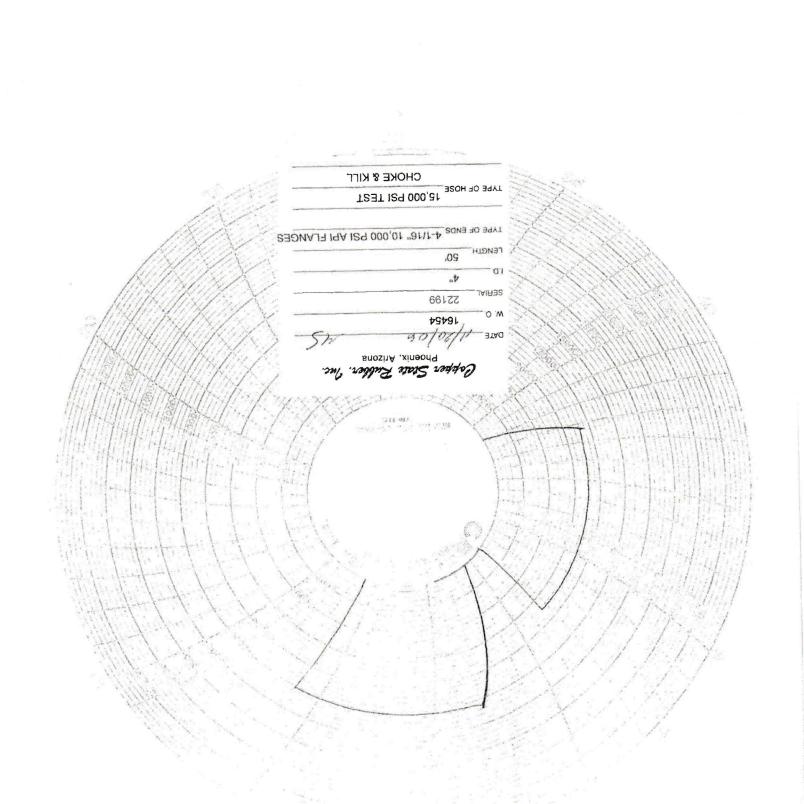
5 MIN. @ 10,000 PSI

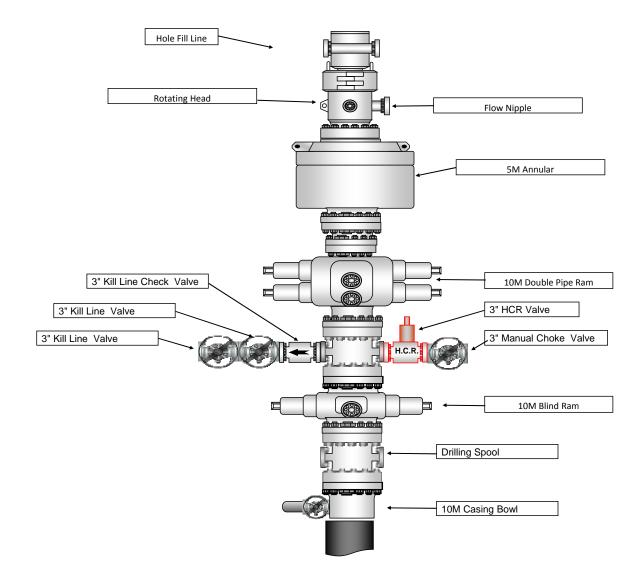
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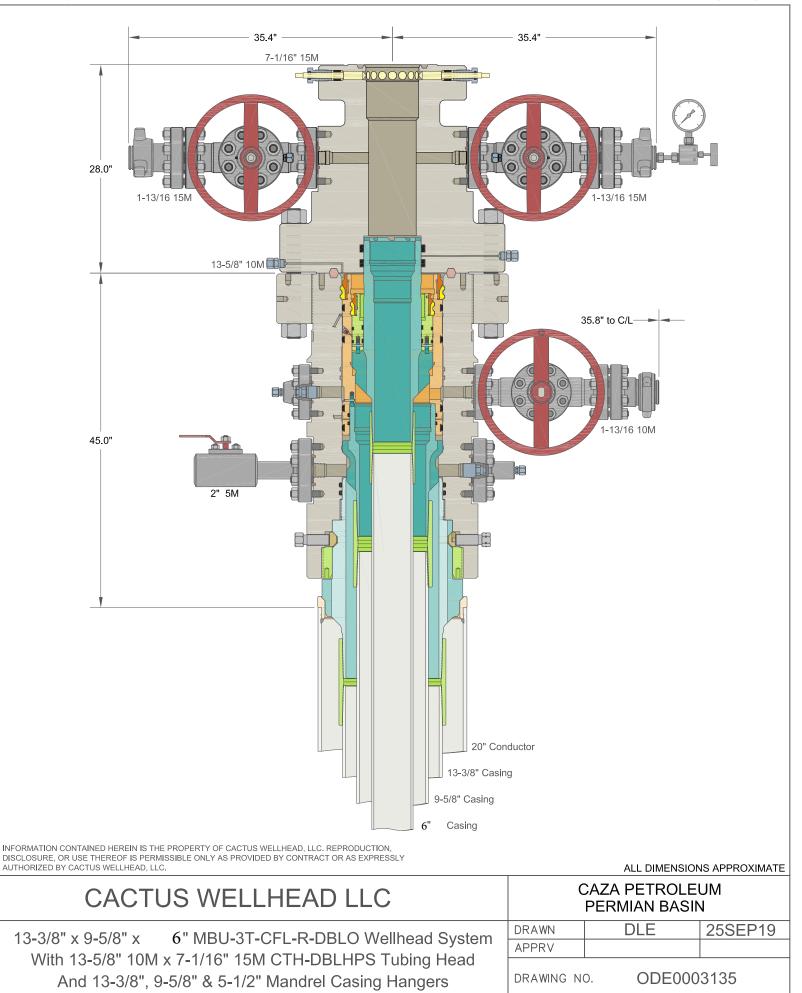
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K	0	(B) EXTERIOR / COVER / BRANDING:
X	0	(A) END CAPS / SLEEVE RECESS:

VISUAL INSPECTION

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1. Component and Preventer Compatibility Table

The table below covers drilling and casing of the 10M MASP portion of the well and outlines the tubulars and the compatible preventers in use. Combined with the mud program, the below documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Component	OD	Preventer	RWP
Drill Pipe	5"		
HWDP	5"		
Drill Collars and MWD	6"-6.75"	Upper 5"-7" VBR	10M
Mud Motor	6.75"-7.25"	LOWERS -7 VBR	
Production Casing	6"		
ALL		Annular	5M
Open-hole	0-13.625"	Blind Rams	10M

VBR = Variable Bore Ram with compatible range listed in chart.

2. Well Control and Shut-In Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are minimum tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. The maximum pressure at which well control is transferred from the annular to another compatible ram is 2500 psi.

Drilling:

- 1. Sound the alarm (alert rig crew)
- 2. Space out the drill string
- 3. Shut down pumps and stop the rotary
- 4. Shut-in the well with the annular with HCR and choke in closed position
- 5. Confirm the well is shut-in
- 6. Notify contractor and company representatives
- 7. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
- 8. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
- 9. Prepare for well kill operation.

Tripping:

- 1. Sound alarm (alert rig crew)
- 2. Stab full opening safety valve and close the valve
- 3. Space out the drill string
- 4. Shut-in the well with the annular with HCR and choke in closed position
- 5. Confirm shut-in
- 6. Notify contractor and company representatives
- 7. Read and record the following data:

Page 1 of 4

Well Control Plan For 10M MASP Section of Wellbore

- Time of shut-in
- SIDPP and SICP
- Pit gain
- 8. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
- 9. Prepare for well kill operation.

Running Casing

- 1. Sound alarm (alert rig crew)
- 2. Stab crossover and valve and close the valve
- 3. Shut-in the well with annular with HCR and choke in closed position
- 4. Confirm shut-in
- 5. Notify contractor and company representatives
- 6. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
- 7. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
- 8. Prepare for well kill operation

No Pipe in Hole (Open Hole)

- 1. At any point when pipe or BHA are not in BOP stack, well will be shut in with blind rams, HCR will be open and choke will be closed. If pressure increase is observed:
- 2. Sound alarm (alert crew)
- 3. Confirm shut-in
- 4. Notify contractor and company representatives
- 5. Read and record the following data
 - Time of shut-in
 - Time of pressure increase
 - SICP
- 6. Prepare for well kill operation

Pulling BHA through BOP Stack

- 1. Prior to pulling last joint/stand of drillpipe through the stack, perform a flow check. If well is flowing:
 - a. Sound alarm (alert crew)
 - b. Stab full opening safety valve and close the valve
 - c. Space out drill string with tooljoint just beneath the upper pipe ram.
 - d. Shut-in the well with upper pipe ram with HCR and choke in closed position
 - e. Confirm shut-in
 - f. Notify contractor and company representatives
 - g. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
 - h. Prepare for well kill operation.

Well Control Plan For 10M MASP Section of Wellbore

2. With BHA in the stack:

- a. If possible to pick up high enough, pull BHA clear of the stack
 - i. Follow "Open Hole" procedure above
- b. If impossible to pick up high enough to pull BHA clear of the stack:
 - i. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
 - ii. Space out drill string with tooljoint just beneath the upper pipe ram.
 - iii. Shut-in the well with upper pipe ram with HCR and choke in closed position
 - iv. Confirm shut-in
 - v. Notify contractor and company representatives
 - vi. Read and record the following:
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain

vii. Prepare for well kill operation.

3. Well Control Drills

Well control drills are specific to the rig equipment, personnel and operation at the time a kick occurs. Each crew will execute one drill weekly relevant to ongoing operations, but will make a reasonable attempt to vary the type of drills. The drills will be recorded in the daily drilling log. Below are minimum tasks for respective well control drills.

Drilling/Pit:

Action	Responsible Party
Initiate Drill Lift Flow Sensor or Pit Float to indicate a kick Immediately record start time 	Company Representative / Rig Manager
 Recognition Driller and/or Crew recognizes indicator Driller stop drilling, pick up off bottom and spaces out drill string, stop pumps and rotary Conduct flow check 	Driller
Initiate ActionSound alarm, notify rig crew that the well is flowing	Company Representative / Rig Manager
 Reaction Driller moves BOP remote and stands by Crew is at their assigned stations Time is stopped Record time and drill type in the Drilling Report 	Driller / Crew

Well Control Plan For 10M MASP Section of Wellbore

Tripping Pit Drills (either in the hole or out of the hole)

Action	Responsible Party
Initiate Drill Lift Flow Sensor or Pit Float to indicate a kick Immediately record start time 	Company Representative / Rig Manager
Recognition Driller recognizes indicator Suspends tripping operations Conduct Flow Check 	Driller
Initiate ActionSound alarm, notify rig crew that the well is flowing	Company Representative / Rig Manager
 Reaction Position tool joint above rotary and set slips Stab FOSV and close valve Driller moves to BOP remote and stands by Crew is at their assigned stations Time is stopped Record time and drill type in the Drilling Report 	Driller / Crew

Choke

Action	Responsible Party
 Have designated choke operator on station at the choke panel Close annular preventer Pressure annulus up 200-300 psi Pump slowly to bump the float and obtain SIDPP At choke operator instruction, slowly bring pumps online to slow pump rate while holding casing pressure constant at the SICP. Allow time for the well to stabilize. Mark and record circulating drillpipe pressure. Measure time lag on drillpipe gauge after choke adjustments. Hold casing pressure constant as pumps are slowed down while choke is closed. Record time and drill type in the Drilling Report 	Company Man / Rig Manager & Rig Crew

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Operator	Caza Operating LLC		Colors:				Name			Remarks				
Well Name & No.	Sioux 25-36 State Fed Com 21H		Choose casings				Date							
County	Lea		Fill in, if applicable				Version							
Location (S/T/R/Ali)				•					-					
Lease Number														
ATS or EC #		APD### or EC###												
Type of Casing	Size of Hole (in)	Size of Casing (in)	Weight per Foot (lbs/ft)	Grade	Yield	Coupling #:	Top (ft)	Bottom (MD) (ft)	Setting Depth (TVD) (TVD of entire string) (ft)	Min Mud Weight (ppg)	Max Mud Weight (ppg)	ID	Drift ID	Cplg OD
Surface	17.500	13.375	54.50	j	55	stc	0	1100	1100	8.40	8.90	12.6150	12.4900	14.3750
Int 1	12.250	9.625	40.00	hcl	80	btc	0	4970	4970	9.20	10.00	8.8350	8.7500	10.6250
Int 1 Taper 1														
<choose casing=""></choose>														
Prod 1	8.500	6.000	24.50	р	110	btc	0	20244	9904	9.00	9.50	5.2000	5.0750	6.8750
<choose casing=""></choose>														
<choose casing=""></choose>														
						Ce	ement							
	Surface			Int 1			Prod 1		<choose casing=""></choose>			<choose casing=""></choose>		
TOC	0		TOC	0		TOC	0		TOC			TOC		
DV Depth			DV Depth			DV Depth			DV Depth			DV Depth		
	Sacks	Yield (ft3/sx)			Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)
Lead	577	1.93	Lead	1370	2.13	Lead 1	1560	2.38	Lead 1			Lead 1		
Tail	309	1.35	Tail	260	1.18	Tail 1	2860	1.62	Tail 1			Tail 1		
DV Lead			DV Lead		2.13	DV Lead			DV Lead			DV Lead		
DV Tail			DV Tail		1.35	DV Tail			DV Tail			DV Tail		
Cmt Added	1530.76	cuft	Cement Added	3224.90	cuft	Cement Added	8346.00	cuft	Cement Added	#N/A	cuft	Cement Added	#N/A	cuft
Cmt Req.	764	cuft	Cement Req.	1611	cuft	Cement Req.	4160	cuft	Cement Req.	0	cuft	Cement Req.	0	cuft
Excess	100.33%		Excess	100.18%		Excess	100.63%		Excess	#N/A		Excess	#N/A	
									-					
Clearances	in Hole	In Surface	in int 1	In Int 1 Taper 1		In Prod 1				Safety Factors	Joint/Body	Collapse	Burst	Alt Burst
Surface	Pass = 1.5625									Surface	8.57	2.22	1.06	1.83
Int 1	Pass = 0.8125	Pass = 0.995								Int 1	4.61	1.64	1.18	2.12
Int 1 Taper 1										Int 1 Taper 1				
Prod 1	Pass = 0.8125	Pass = 2.87	Pass = 0.98	No Overlap	No Overlap					Prod 1	3.31	2.34	2.63	4.75
	-						•				-			
			BOP Requirer	nents After the Sho	e	-								

	BOP Requirements After the Shoe								
	Surface		Int 1	Prod 1					
Max. Surf. Pressure	1488 psi	Max. Surf. Pressure	2709 psi	Max. Surf. Pressure	psi				
BOP Required	2M System	BOP Required	3M System	BOP Required	System				
	<choose casing=""></choose>								
Max. Surf. Pressure	psi								
BOP Required	System	1							

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Operator	Caza Operating LLC	1	Colors:	1			Name		1	Remarks				
Well Name & No.	Sioux 25-36 State Fed Com 21H		Choose casings				Date							
County	Lea		Fill in, if applicable	1			Version							
Location (S/T/R/Ali)														
Lease Number														
ATS or EC #		APD### or EC###												
Type of Casing	Size of Hole (in)	Size of Casing (in)	Weight per Foot (lbs/ft)	Grade	Yield	Coupling #:	Top (ft)	Bottom (MD) (ft)	Setting Depth (TVD) (TVD of entire string) (ft)	Min Mud Weight (ppg)	Max Mud Weight (ppg)	ID	Drift ID	Cplg OD
Surface	17.500	13.375	54.50	j	55	stc	0	1100	1100	8.40	8.90	12.6150	12.4900	14.3750
Int 1	12.250	9.625	40.00	hcl	80	btc	0	4970	4970	9.20	10.00	8.8350	8.7500	10.6250
Int 1 Taper 1														
<choose casing=""></choose>														
Prod 1	8.500	6.000	24.50	р	110	btc	0	20244	9904	9.00	9.50	5.2000	5.0750	6.8750
<choose casing=""></choose>														
<choose casing=""></choose>														
						Ce	ment							
	Surface			Int 1			Prod 1			<choose casing=""></choose>			<choose casing<="" td=""><td>\$></td></choose>	\$>
TOC	0		TOC	0		TOC	0		TOC			TOC		
DV Depth			DV Depth			DV Depth			DV Depth			DV Depth		
	Sacks	Yield (ft3/sx)			Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)
Lead	577	1.93	Lead	1370	2.13	1								
Tail	309					Lead 1	1560	2.38	Lead 1			Lead 1		
	303	1.35	Tail	260	1.18	Tail 1	1560 2860	2.38 1.62	Lead 1 Tail 1			Lead 1 Tail 1		
DV Lead	309	1.35												
DV Lead DV Tail	305	1.35	Tail		1.18	Tail 1			Tail 1			Tail 1		
	1530.76	1.35	Tail DV Lead		1.18 2.13	Tail 1 DV Lead			Tail 1 DV Lead	#N/A	cuft	Tail 1 DV Lead	#N/A	cuft
DV Tail			Tail DV Lead DV Tail	260	1.18 2.13 1.35	Tail 1 DV Lead DV Tail	2860	1.62	Tail 1 DV Lead DV Tail	#N/A 0	cuft cuft	Tail 1 DV Lead DV Tail	#N/A 0	cuft cuft
DV Tail Cmt Added	1530.76	cuft	Tail DV Lead DV Tail Cement Added	260 3224.90	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added	2860 8346.00	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added			Tail 1 DV Lead DV Tail Cement Added		
DV Tail Cmt Added Cmt Req.	1530.76 764	cuft	Tail DV Lead DV Tail Cement Added Cement Req.	260 3224.90 1611	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A	cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0	
DV Tail Cmt Added Cmt Req.	1530.76 764 100.33% in Hole	cuft	Tail DV Lead DV Tail Cement Added Cement Req.	260 3224.90 1611	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0	cuft Joint/Body	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse	0 #N/A Burst	cuft Alt Burst
DV Tail Cmt Added Cmt Req. Excess	1530.76 764 100.33%	cuft cuft	Tail DV Lead DV Tail Cement Added Cement Req. Excess	260 3224.90 1611 100.18%	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A	cuft Joint/Body 8.57	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	0 #N/A	cuft Alt Burst 1.83
DV Tail Cmt Added Cmt Req. Excess Clearances	1530.76 764 100.33% in Hole	cuft cuft	Tail DV Lead DV Tail Cement Added Cement Req. Excess	260 3224.90 1611 100.18%	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A Safety Factors	cuft Joint/Body	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse	0 #N/A Burst	cuft Alt Burst
DV Tail Cmt Added Cmt Req. Excess Clearances Surface	1530.76 764 100.33% in Hole Pass = 1.5625	cuft cuft In Surface	Tail DV Lead DV Tail Cement Added Cement Req. Excess	260 3224.90 1611 100.18%	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A Safety Factors Surface	cuft Joint/Body 8.57	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse 2.22	0 #N/A Burst 1.06	cuft Alt Burst 1.83
DV Tail Cmt Added Cmt Req. Excess Clearances Surface Int 1	1530.76 764 100.33% in Hole Pass = 1.5625	cuft cuft In Surface	Tail DV Lead DV Tail Cement Added Cement Req. Excess	260 3224.90 1611 100.18%	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A Safety Factors Surface Int 1	cuft Joint/Body 8.57	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse 2.22	0 #N/A Burst 1.06	cuft Alt Burst 1.83
DV Tail Cmt Added Cmt Req. Excess Clearances Surface Int 1	1530.76 764 100.33% in Hole Pass = 1.5625	cuft cuft In Surface	Tail DV Lead DV Tail Cement Added Cement Req. Excess	260 3224.90 1611 100.18%	1.18 2.13 1.35 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A Safety Factors Surface Int 1	cuft Joint/Body 8.57	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse 2.22	0 #N/A Burst 1.06	cuft Alt Burst 1.83
DV Tail Cmt Added Cmt Req. Excess Clearances Surface Int 1 Int 1 Taper 1	1530.76 764 100.33% in Hole Pass = 1.5625 Pass = 0.8125	cuft cuft In Surface Pass = 0.995	Tail DV Lead DV Tail Cement Added Cement Req. Excess In Int 1	260 3224.90 1611 100.18% In Int 1 Taper 1	1.18 2.13 1.35 cuft cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A Safety Factors Surface Int 1 Int 1 Taper 1	cuft Joint/Body 8.57 4.61	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse 2.22 1.64	0 #N/A Burst 1.06 1.18	Cuft Alt Burst 1.83 2.12
DV Tail Cmt Added Cmt Req. Excess Clearances Surface Int 1 Int 1 Taper 1	1530.76 764 100.33% in Hole Pass = 1.5625 Pass = 0.8125	cuft cuft In Surface Pass = 0.995	Tail DV Lead DV Tail Cement Added Cement Req. Excess In Int 1	260 3224.90 1611 100.18% In Int 1 Taper 1	1.18 2.13 1.35 cuft cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A Safety Factors Surface Int 1 Int 1 Taper 1	cuft Joint/Body 8.57 4.61	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse 2.22 1.64	0 #N/A Burst 1.06 1.18	Cuft Alt Burst 1.83 2.12
DV Tail Cmt Added Cmt Req. Excess Clearances Surface Int 1 Int 1 Taper 1	1530.76 764 100.33% in Hole Pass = 1.5625 Pass = 0.8125	cuft cuft In Surface Pass = 0.995	Tail DV Lead DV Tail Cement Added Cement Req. Excess in Int 1 Pass = 0.98	260 3224.90 1611 100.18% In Int 1 Taper 1	1.18 2.13 1.35 cuft cuft No Overlap	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess	2860 8346.00 4160	1.62 cuft	Tail 1 DV Lead DV Tail Cement Added Cement Req.	0 #N/A Safety Factors Surface Int 1 Int 1 Taper 1	cuft Joint/Body 8.57 4.61	Tail 1 DV Lead DV Tail Cement Added Cement Req. Excess Collapse 2.22 1.64	0 #N/A Burst 1.06 1.18	Cuft Alt Burst 1.83 2.12

	BOP Requirements After the Shoe								
	Surface		Int 1	Prod 1					
Max. Surf. Pressure	1488 psi	Max. Surf. Pressure	2709 psi	Max. Surf. Pressure	psi				
BOP Required	2M System	BOP Required	3M System	BOP Required	System				
	<choose casing=""></choose>								
Max. Surf. Pressure	psi								
BOP Required	System								

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Operator	Caza Operating LLC		Colors:				Name			Remarks				
Well Name & No.	Sioux 25-36 State Fed Com 21H		Choose casings				Date							
County	Lea		Fill in, if applicable				Version							
Location (S/T/R/Ali)				_										
Lease Number														
ATS or EC #		APD### or EC###												
		-												
Type of Casing	Size of Hole (in)	Size of Casing (in)	Weight per Foot (lbs/ft)	Grade	Yield	Coupling #:	Top (ft)	Bottom (MD) (ft)	Setting Depth (TVD) (TVD of entire string) (ft)	Min Mud Weight (ppg)	Max Mud Weight (ppg)	ID	Drift ID	Cplg OD
Surface	17.500	13.375	54.50	j	55	stc	0	1100	1100	8.40	8.90	12.6150	12.4900	14.3750
Int 1	12.250	9.625	40.00	hcl	80	btc	0	4970	4970	9.20	10.00	8.8350	8.7500	10.6250
Int 1 Taper 1														
<choose casing=""></choose>														
Prod 1	8.500	6.000	24.50	р	110	btc	0	20244	9904	9.00	9.50	5.2000	5.0750	6.8750
<choose casing=""></choose>														
<choose casing=""></choose>														
						Ce	ement							
	Surface			Int 1			Prod 1		<choose casing=""></choose>			<choose casing=""></choose>		
TOC	0		TOC	0		TOC	0		TOC			TOC		
DV Depth			DV Depth			DV Depth		1	DV Depth			DV Depth		
	Sacks	Yield (ft3/sx)			Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)
Lead	577	1.93	Lead	1370	2.13	Lead 1	1560	2.38	Lead 1			Lead 1		
Tail	309	1.35	Tail	260	1.18	Tail 1	2860	1.62	Tail 1			Tail 1		
DV Lead			DV Lead		2.13	DV Lead			DV Lead			DV Lead		
DV Tail			DV Tail		1.35	DV Tail			DV Tail			DV Tail		
Cmt Added	1530.76	cuft	Cement Added	3224.90	cuft	Cement Added	8346.00	cuft	Cement Added	#N/A	cuft	Cement Added	#N/A	cuft
Cmt Req.	764	cuft	Cement Req.	1611	cuft	Cement Reg.	4160	cuft	Cement Reg.	0	cuft	Cement Req.	0	cuft
Excess	100.33%		Excess	100.18%		Excess	100.63%	1	Excess	#N/A		Excess	#N/A	
Clearances	in Hole	In Surface	in int 1	In Int 1 Taper 1		In Prod 1				Safety Factors	Joint/Body	Collapse	Burst	Alt Burst
Surface	Pass = 1.5625									Surface	8.57	2.22	1.06	1.83
Int 1	Pass = 0.8125	Pass = 0.995								Int 1	4.61	1.64	1.18	2.12
Int 1 Taper 1										Int 1 Taper 1				
Prod 1	Pass = 0.8125	Pass = 2.87	Pass = 0.98	No Overlap	No Overlap					Prod 1	3.31	2.34	2.63	4.75
				, i i i i i i i i i i i i i i i i i i i										
			BOP Requirer	nents After the Sho	be and a second s									
	Cuntors						Drod 1							

BOP Requirements After the Shoe								
	Surface		Int 1		Prod 1			
Max. Surf. Pressure	1488 psi	Max. Surf. Pressure	2709 psi	Max. Surf. Pressure	psi			
BOP Required	2M System	BOP Required	3M System	BOP Required	System			
	<choose casing=""></choose>							
Max. Surf. Pressure	psi							
BOP Required	System							

Caza Oil and Gas, Inc

H2S Drilling Operations Plan Sioux 25-36 State Fed Com 9H Lea County, New Mexico

Prepared by: Steve Morris

Date: 06/27/2018

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Table of Contents

H2S Contingency Plan Section
Scope:
Objective:
Emergency Procedures Section
Emergency Procedures
Emergency Procedure Implementation4
Simulated Blowout Control Drills5
Ignition Procedures
Responsibility:
Instructions for Igniting the Well:
Training Program9
Emergency Equipment Requirements9
CHECK LISTS
Status Check List
Procedural Check List
Briefing Procedures
Pre-Spud Meeting14
Evacuation Plan15
General Plan15
Emergency Assistance Telephone List15
MAPS AND PLATS

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H2S Contingency Plan Section

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, of following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H2S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H2S into the atmosphere.

Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

Implementation: This plan, with all details, is to be fully implemented 1000' before drilling into the first sour zone.

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to 1000' before drilling into the first sour zone.

Emergency Call Lists: Included are the telephone numbers of all persons that would need to be contacted, should an H2S emergency occur.

Briefing: This section deals with the briefing of all persons involved with the drilling of this well.

Public Safety: Public safety personnel will be made aware of the drilling of this well.

Check Lists: Status check lists and procedural check lists have been included to ensure adherence to the plan.

General Information: A general information section has been included to supply support information.

Emergency Procedures Section

Emergency Procedures

- I. In the event of any evidence of H2S level above 10 ppm, take the following steps immediately:
 - A. Secure breathing apparatus.
 - B. Order non-essential personnel out of the danger zone.
 - C. Take steps to determine if the H2S level can be corrected or suppressed, and if so, proceed with normal operations.

II. If uncontrollable conditions occur, proceed with the following:

- A. Take steps to protect and/or remove any public downwind of the rig, including partial evacuation or isolation. Notify necessary public safety personnel and the New Mexico Oil & Gas of the situation.
- B. Remove all personnel to the safe briefing area.
- C. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.
- D. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety measures.

III. Responsibility:

- A. The company approved supervisor shall be responsible for the total implementation of the plan.
- B. The company approved supervisor shall be in complete command during any emergency.
- C. The company approved supervisor shall designate a backup supervisor in the event that he/she is not available.

Emergency Procedure Implementation

I. Drilling or Tripping:

- A. All Personnel
 - 1. When alarm sounds, don escape unit and report to upwind safe briefing area.
 - 2. Check status of other personnel (buddy system).
 - 3. Secure breathing apparatus.
 - 4. Wait for orders from supervisor.
- B. Drilling Foreman
 - 1. Report to the upwind safe briefing area.
 - 2. Don breathing apparatus and return to the point of release with the Tool pusher of Driller (buddy system).
 - 3. Determine the concentration of H2S.
 - 4. Address the situation and take appropriate control measures.
- C. Tool Pusher
 - 1. Report to the upwind safe briefing area.
 - 2. Don breathing apparatus and return to the point of release with the Drilling Foreman or the Driller (buddy system).

- 3. Determine the concentration.
- 4. Address the situation and take appropriate control measures.
- D. Driller
 - 1. Check the status of other personnel (in a rescue attempt, always use the buddy system).
 - 2. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.
 - 3. Assume the responsibility of the Drilling Foreman and the Tool Pusher until they arrive, in the event of their absence.
- E. Derrick Man and Floor Hands
 - 1. Remain in the upwind safe briefing area until otherwise instructed by a supervisor.
- F. Mud Engineer
 - 1. Report to the upwind safe briefing area.
 - 2. When instructed, begin check of mud for PH level and H2S level.
- G. Safety Personnel
 - 1. Don breathing apparatus.
 - 2. Check the status of all personnel.
 - 3. Wait for instructions from Drilling Foreman or Tool Pusher.

II. Taking a Kick:

- A. All personnel report to the upwind safe briefing area.
- B. Follow standard BOP procedures.

III. Open Hole Logging:

- A. All unnecessary personnel should leave the rig floor.
- B. Drilling Foreman and Safety personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging:

- A. Follow "Drilling or Tripping" procedures.
- B. Assure that all personnel have access to protective equipment.

Simulated Blowout Control Drills

All drills will be initiated by activating alarm devices (air horn). One long blast on the air horn for ACTUAL and SIMULATED blowout control drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

- Drill #1 On-bottom Drilling
- Drill #2 Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire put drill assignment. The times must be recorded on the IADC Driller's log as "Blowout Control Drill".

Drill No.:		
Reaction Time to Shut-in:	minutes,	seconds.
Total Time to Complete Assignment:	minutes,	seconds.

- I. Drill Overviews:
 - A. Drill No. 1 On-bottom Drilling
 - 1. Sound the alarm immediately.
 - 2. Stop the rotary and hoist the Kelly joint above the rotary table.
 - 3. Stop the circulatory pump.
 - 4. Close the drill pipe rams.
 - 5. Record casing and drill pipe shut-in pressures and pit volume increases.
 - B. Drill No. 2 Tripping Drill Pipe:
 - 1. Sound the alarm immediately.
 - 2. Position the upper tool joint just above the rotary table and set the slips.
 - 3. Install a full opening valve inside blowout preventer tool in order to close the drill pipe.
 - 4. Close the drill pipe rams.
 - 5. Record the shut-in annular pressure.

II. Crew Assignments

- A. Drill No. 1 On-bottom Drilling:
 - 1. Driller
 - a) Stop the rotary and hoist the Kelly joint above the rotary table.
 - b) Stop the circulatory pump.
 - c) Check flow.
 - d) If flowing, sound the alarm immediately.
 - e) Record the shut-in drill pipe pressure.
 - f) Determine the mud weight increase needed or other courses of action.
 - 2. Derrick Man
 - a) Open choke line valve at BOP.
 - b) Signal Floor Man #1 at accumulator that choke line is open.
 - c) Close choke upstream valve after pipe rams have been closed.
 - d) Read the shut-in annular pressure and report readings to Driller.
 - 3. Floor Man #1
 - a) Close the pipe rams after receiving the signal from the Derrick Man.
 - b) Report to Driller for further instructions.
 - 4. Floor Man #2
 - a) Notify the Tool Pusher and Operator Representative of the H2S alarms.
 - b) Check for open fires and, if safe to do so, extinguish them.
 - c) Stop all welding operations.
 - d) Turn-off all non-explosive proof lights and instruments.

- e) Report to Driller for further instructions.
- 5. Tool Pusher
 - a) Report to the rig floor.
 - b) Have a meeting with all crews.
 - c) Compile and summarize all information.
 - d) Calculate the proper kill weight.
 - e) Ensure that proper well procedures are put into action.
- 6. Operator Representative
 - a) Notify the Drilling Superintendent.
 - b) Determine if an emergency exists and if so, activate the contingency plan.
- B. Drill No. 2 Tripping Pipe:
 - 1. Driller
 - a) Sound the alarm immediately when mud volume increase has been detected.
 - b) Position the upper tool joint just above the rotary table and set slips.
 - c) Install a full opening valve or inside blowout preventer tool to close the drill pipe.
 - d) Check flow.
 - e) Record all data reported by the crew.
 - f) Determine the course of action.
 - 2. Derrick Man
 - a) Come down out of derrick.
 - b) Notify Tool Pusher and Operator Representative.
 - c) Check for open fires and, if safe to do so, extinguish them.
 - d) Stop all welding operations.
 - e) Report to Driller for further instructions.
 - 3. Floor Man #1
 - a) Pick up full opening valve or inside blowout preventer tool and slab into tool join above rotary table (with Floor Man #2)
 - b) Tighten valve with back-up tongs.
 - c) Close pipe rams after signal from Floor Man #2.
 - d) Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.
 - e) Report to Driller for further instructions.
 - 4. Floor Man #2
 - a) Pick-up full opening valve or inside blowout preventer tool and tab into tool joint above rotary table (with Floor Man #1)
 - b) Position back-up tongs on drill pipe.
 - c) Open choke line valve at BOP.
 - d) Signal Floor Man #1 at accumulator that choke line is open.
 - e) Close choke and upstream valve after pipe rams have been closed.
 - f) Check for leaks on BOP stack and choke manifold.

- g) Read annular pressure.
- h) Report readings to the Driller.
- 5. Tool Pusher
 - a) Report to the rig floor.
 - b) Have a meeting with all of the crews.
 - c) Compile and summarize all information.
 - d) See that proper well kill procedures are put into action.
- 6. Operator Representative
 - a) Notify Drilling Superintendent.
 - b) Determine if an emergency exists, and if so, activate the contingency plan

Ignition Procedures

Responsibility:

The decision to ignite the well is responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. In the event of the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

- 1. Human life and property are endangered.
- 2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well:

- Two people are required for the actual igniting operation. Both men must wear selfcontained breathing apparatus and must use a full body harness and attach a retrievable safety line to the D-Ring in the back. One man must monitor the atmosphere for explosive gases with the LEL monitor, while the Drilling Foreman is responsible for igniting the well.
- 2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.
- 3. Ignite from upwind and do not approach any closer than is warranted.
- 4. Select the ignition site best suited for protection and which offers an easy escape route.
- 5. Before igniting, check for the presence of combustible gases.
- 6. After igniting, continue emergency actions and procedures as before.
- 7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

Training Program

When working in an area where Hydrogen Sulfide (H2S) might be encountered, definite training requirements for all personnel must be carried out. The Company Supervisor will ensure that all personnel at the well site have had adequate training in the following:

- 1. Hazards and Characteristics of Hydrogen Sulfide.
- 2. Physicals effects of Hydrogen Sulfide on the human body.
- 3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
- 4. H2S detection, emergency alarm and sensor location.
- 5. Emergency rescue.
- 6. Resuscitators.
- 7. First aid and artificial resuscitation.
- 8. The effects of Hydrogen Sulfide on metals.
- 9. Location safety.

Service company personnel and visiting personnel must be notified if the zone contains H2S, and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

Emergency Equipment Requirements

Lease Entrance Sign:

Should be located at the lease entrance with the following information:

CAUTION- POTENTIAL POISON GAS HYDROGEN SULFIDE

Well Control Equipment:

- A flare line will be located a minimum of 150' from the wellhead to be ignited by a flare gun.
- The choke manifold will include a remotely operated choke.
- A mud/gas separator will be installed to separate gas from the drilling mud.

Mud Program:

The drilling mud program has been designed to minimize the volume of hydrogen sulfide (H2S) circulated to surface. The operator will have the necessary mud products on location to minimize the hazards while drilling in H2S-bearing zones.

Metallurgy:

- All drill strings, casings, tubing, wellhead equipment, the blowout preventer, the drilling spool, kill lines, choke manifold and lines, and all valves shall be suitable for H2S service.
- All elastomers used for packing and seals shall be H2S trim.

Respiratory Equipment:

• Fresh air breathing equipment should be placed at the safe briefing areas and should include the following: Two SCBA's will be placed at each briefing area. A moveable breathing air trailer with 2 SCBA's, 5 work/escape units, ample breathing air hose and manifolds will be on location. The breathing air hose will be installed on the rig floor and derrick along with breathing air manifolds so that it will not restrict work activity. All employees that may wear respiratory will complete a MEQ and be quantitative fit tested 1000' prior to the 1st zone that may contain H2S.

Windsocks or Wind Streamers:

- A minimum of two 10" windsocks located at strategic locations so that they may be seen from any point on location. More will be used if necessary for wind consciousness.
- Wind streamers (if preferred) should be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location).

Hydrogen Sulfide Detector and Alarms:

- 1 Four channel H2S monitor with audible and visual alarms, strategically located to be seen and heard by all employees working on the well site. All sensors will be bump tested or calibrated if necessary on a weekly basis. The alarms will be set to visually alarm at 10 PPM and audible at 14 PPM.
- Four (4) sensors located as follows: #1 -Rig Floor, #2 & #3- Bell Nipple, #4- End of flow line where wellbore fluid is discharged.
- Portable color metric tube detector with tubes will be stored in the Tool Pusher trailer.

Well Condition Sign and Flags:

The Well Condition Sign with flags should be placed a minimum of 150' before entry to the location. It should have three (3) color coded flags (green, yellow and red) that will be used to denote the following location conditions:

GREEN - Normal Operating Conditions

YELLOW - Potential Danger

RED - Danger, H2S Gas Present

Auxiliary Rescue Equipment:

- Stretcher (drilling contractor)
- 2-100' OSHA approved Rescue lines (drilling contractor)
- First Aid Kit properly stocked (drilling contractor)

Mud Inspection Equipment:

Garret Gas Train or Hach Tester for inspection of Hydrogen Sulfide in the drilling mud system.

Fire Extinguishers:

Adequate fire extinguishers shall be located at strategic locations (provided by drilling contractor)

Blowout Preventer:

- The well shall have hydraulic BOP equipment for the anticipated BHP.
- The BOP should be tested upon installation.
- BOP, Choke Line and Kill Line will be tested as specified by Operator.

Confined Space Monitor:

There should be a portable multi-gas monitor with at least 3 sensors (02, LEL & H2S). This instrument should be used to test the atmosphere of any confined space before entering. It should also be used for atmospheric testing for LEL gas before beginning any type of Hot Work. Proper calibration documentation will need to be provided. (Supplied by Drilling Contractor)

Communication Equipment:

- Proper communication equipment such as cell phones or 2 -way radios should be available at the rig.
- Radio communication shall be available for communication between the company man's trailer, rig floor and the tool pusher's trailer.
- Communication equipment shall be available on the vehicles.

Special Control Equipment:

- Hydraulic BOP equipment with remote control on the ground.
- Rotating head at the surface casing point.
- BOP, Choke Manifold and Process Flow Diagrams (see the attached previously submitted)
- Patriot Rig #5 SM Choke Manifold Equipment (see the attached previously submitted)

Evacuation Plan:

- Evacuation routes should be established prior to spudding the well.
- Should be discussed with all rig personnel.

Designated Areas:

Parking and Visitor area:

- All vehicles are to be parked at a pre-determined safe distance from the wellhead.
- Designated smoking area.

Safe Briefing Areas:

- Two safe briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
- Personal protective equipment should be stored at both briefing areas or if a moveable cascade trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both briefing areas should be accessible.

NOTES:

- Additional personal H2S monitors are available for all employees on location.
- Automatic Flare Igniters are recommended for installation on the rig.

CHECK LISTS

Status Check List

Note: Date each item as they are implemented.

- 1. Sign at location entrance.
- 2. Two (2) wind socks (in required locations).
- 3. Wind Streamers (if required).
- 4. SCBA's on location for all rig personnel and mud loggers.
- 5. Air packs, inspected and ready for use.
- 6. Spare bottles for each air pack (if required).
- 7. Cascade system for refilling air bottles.
- 8. Cascade system and hose line hook up.
- 9. Choke manifold hooked-up and tested. (Before drilling out surface casing.)
- 10. Remote Hydraulic BOP control (hooked-up and tested before drilling out surface casing).
- 11.BOP tested (before drilling out surface casing).
- 12. Mud engineer on location with equipment to test mud for H2S.
- 13. Safe Briefing Areas set-up.
- 14. Well Condition sign and flags on location and ready.
- 15. Hydrogen Sulfide detection system hooked-up & tested.
- 16. Hydrogen Sulfide alarm system hooked-up & tested.
- 17. Stretcher on location at Safe Briefing Area.
- 18.2-100' OSHA Approved Life Lines on location.
- 19.1-20# Fire Extinguisher in safety trailer.
- 20. Confined Space Monitor on location and tested.
- 21. All rig crews and supervisor trained (as required).
- 22. Access restricted for unauthorized personnel.
- 23. Drills on H2S and well control procedures.
- 24. All outside service contractors advised of potential H2S on the well.
- 25. NO SMOKING sign posted.
- 26. H2S Detector Pump w/tubes on location.
- 27.25mm Flare Gun on location w/flares.
- 28. Automatic Flare Igniter installed on rig.

Procedural Check List

Perform the following on each tour:

- 1. Check fire extinguishers to see that they have the proper charge.
- 2. Check breathing equipment to insure that they have not been tampered with.
- 3. Check pressure on the supply air bottles to make sure they are capable of recharging.
- 4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

1. Check each piece of breathing equipment to make sure that they are fully charged and operational. This requires that the air cylinder be opened and the mask assembly be put on and tested to make sure that the regulators and

masks are properly working. Negative and positive pressure should be conducted on all masks.

- 2. BOP skills.
- 3. Check supply pressure on BOP accumulator stand-by source.
- 4. Check all breathing air mask assemblies to see that straps are loosened and turned back, ready to use.
- 5. Check pressure on cascade air cylinders to make sure they are fully charged and ready to use for refill purposes if necessary.
- 6. Check all cascade system regulators to make sure they work properly.
- 7. Perform breathing drills with on-site personnel.
- 8. Check the following supplies for availability:
 - Stretcher
 - Safety Belts and ropes.
 - Spare air bottles.
 - Spare oxygen bottles (if resuscitator required).
 - Gas Detector Pump and tubes.
 - Emergency telephone lists.
- 9. Test the Confined Space Monitor to verify the batteries are good and that the unit is in good working condition and has been properly calibrated according to manufacturer's recommendations.

Briefing Procedures

The following scheduled briefings will be held to ensure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well.

Attendance: Drilling Supervisor Drilling Engineer Drilling Foreman Rig Tool Pushers Mud Engineer All Safety Personnel Key Service Company Personnel

Purpose: Review and discuss the well program, step-by-step, to ensure complete understanding of assignments and responsibilities.

Evacuation Plan

General Plan

The direct lines of action prepared by Caza SAFETY, to protect the public from hazardous gas situations are as follows:

- 1. When the company approved supervisor (Drilling Foremen, Tool Pusher or Driller) determine that Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area Map.
- 2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation needs to be implemented.
- 3. Company approved safety personnel that have been trained in the use of the proper emergency equipment will be utilized.
- Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

Emergency Assistance Telephone List

PUBLIC SAFETY: 911 or

Lea County Sheriff or Police	(575) 396-3611
Fire Department	(575) 397-9308
Hospital	(575) 492-5000
Ambulance	
Department of Public Safety	(392) 392-5588
Oil Conservation Division	(575) 748-1823
New Mexico Energy, Minerals & Natural Resources Department	(575) 748-1283
	Page 15 of 16

Caza Oil and Gas, Inc:

Office	(423) 682-7424
VP Operations: Tony Sam	
Office	(423) 682-7424
Cell	(432) 556-6708
Project Manager: Steve Morris Cell	(972) 835-3315
Project Manager: Joel Stockford	
Cell	(972) 835-3349

The geologic zones that will be encountered during drilling may contain hazardous quantities of H2S. The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a hand delivered written notice describing the activities, potential hazards, and conditions of evacuation, evacuation drill siren alarms and other precautionary measures.

Evacuee Description:

Residents: THERE ARE NO RESIDENTS WITHIN 3000' ROE.

Notification Process:

A continuous siren audible to all residence will be activated, signaling evacuation of previously notified and informed residents.

Evacuation Plan:

All evacuees will migrate laterally toward the wind direction.

Caza Oil and Gas, Inc. will identify all home bound or highly susceptible individuals and make special evacuation preparations, interfacing with the local and emergency medical service as necessary.

MAPS AND PLATS

See the attached map showing the 3000' ROE clarification.



Caza Operating LLC

Sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H

Plan: Sioux 25-36 State Fed Com 21H - Plan

Morcor Standard Plan

19 May, 2021

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Survey Tool Program	Date	5/19/2021		
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(usft)	(usft)	Survey (Wellbore)	Tool Name	Description
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Page 77

of 125



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	100.0	0.00	0.00	100.0	-3,013.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	200.0	0.00	0.00	200.0	-2,913.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
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	500.0	0.00	0.00	500.0	-2,613.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	600.0	0.00	0.00	600.0	-2,513.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	700.0	0.00	0.00	700.0	-2,413.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	800.0	0.00	0.00	800.0	-2,313.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	900.0	0.00	0.00	900.0	-2,213.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
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	1,300.0	0.00	0.00	1,300.0	-1,813.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	1,400.0	0.00	0.00	1,400.0	-1,713.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	1,500.0	0.00	0.00	1,500.0	-1,613.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	1,600.0	0.00	0.00	1,600.0	-1,513.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	1,700.0	0.00	0.00	1,700.0	-1,413.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	1,800.0	0.00	0.00	1,800.0	-1,313.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	1,900.0	0.00	0.00	1,900.0	-1,213.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	2,000.0	0.00	0.00	2,000.0	-1,113.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	2,100.0	0.00	0.00	2,100.0	-1,013.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	2,200.0	0.00	0.00	2,200.0	-913.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	2,300.0	0.00	0.00	2,300.0	-813.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
	2,400.0	0.00	0.00	2,400.0	-713.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00



Received by OCD: 6/24/2022 9:12:19 AM

Company: Project: Site: Well: Wellbore: Design:	Sioux 2 Sioux 2 Sioux 2 Sioux 2	Caza Operating LLC Sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H - Plan						Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:		Well Sioux 25-36 State Fed Com 21H WELL @ 3113.0usft (Original Well Elev) WELL @ 3113.0usft (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Db	
Planned Survey											
MD (usft)		Inc (°)	Azi (azimuth) T\ (°) (us		TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
2,50	0.0	0.00	0.00	2,500.0	-613.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
2,60	0.0	0.00	0.00	2,600.0	-513.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
2,70	0.0	0.00	0.00	2,700.0	-413.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
2,80	0.0	0.00	0.00	2,800.0	-313.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
2,90	0.0	0.00	0.00	2,900.0	-213.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,00		0.00	0.00	3,000.0	-113.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,10	0.0	0.00	0.00	3,100.0	-13.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,11	3.0	0.00	0.00	3,113.0	0.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
Top of S	alt										
3,20	0.0	0.00	0.00	3,200.0	87.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,25	4.0	0.00	0.00	3,254.0	141.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
Tansil											
3,30	0.0	0.00	0.00	3,300.0	187.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,38	5.0	0.00	0.00	3,385.0	272.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
Yates											
3,40		0.00	0.00	3,400.0	287.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,50	0.0	0.00	0.00	3,500.0	387.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,57	5.0	0.00	0.00	3,575.0	462.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
Seven R 3,60		0.00	0.00	3,600.0	487.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,70	0.0	0.00	0.00	3,700.0	587.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,80	0.0	0.00	0.00	3,800.0	687.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
3,80	1.0	0.00	0.00	3,801.0	688.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
Queen											
3,90	0.0	0.00	0.00	3,900.0	787.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,00	0.0	0.00	0.00	4,000.0	887.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,10	0.0	0.00	0.00	4,100.0	987.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00

5/19/2021 2:15:05AM



Morcor Engineering Morcor Standard Plan

Received by OCD: 6/24/2022 9:12:19 AM

Company: Project: Site: Well: Wellbore: Design:	roject: Sioux 25-36 State Fed Com 21H ite: Sioux 25-36 State Fed Com 21H /ell: Sioux 25-36 State Fed Com 21H /ellbore: Sioux 25-36 State Fed Com 21H sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H /ellbore: Sioux 25-36 State Fed Com 21H sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H		Com 21H Com 21H Com 21H				Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:		Well Sioux 25-36 State Fed Com 21H WELL @ 3113.0usft (Original Well Elev) WELL @ 3113.0usft (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Db		
Planned Survey MD (usft)		Inc (°)	Azi (azimuth) TVE (°) (usfi		TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
4,17	7.0	0.00	0.00	4,177.0	1,064.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
Grayburg	J										
4,20	0.0	0.00	0.00	4,200.0	1,087.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,30	0.0	0.00	0.00	4,300.0	1,187.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,40	0.0	0.00	0.00	4,400.0	1,287.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,50	0.0	0.00	0.00	4,500.0	1,387.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,60	0.0	0.00	0.00	4,600.0	1,487.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,62	5.0	0.00	0.00	4,625.0	1,512.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
San And	res										
4,70	0.0	0.00	0.00	4,700.0	1,587.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,80	0.0	0.00	0.00	4,800.0	1,687.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
4,900	0.0	0.00	0.00	4,900.0	1,787.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
5,00	0.0	0.00	0.00	5,000.0	1,887.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
5,01	9.0	0.00	0.00	5,019.0	1,906.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
Delaware	•										
5,10	0.0	0.00	0.00	5,100.0	1,987.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
5,15	0.0	0.00	0.00	5,150.0	2,037.0	0.0	0.0	855,960.55	404,650.88	0.00	0.00
5,20	0.0	1.55	270.00	5,200.0	2,087.0	0.0	-0.7	855,959.87	404,650.88	0.02	3.10
5,30	0.0	4.65	270.00	5,299.8	2,186.8	0.0	-6.1	855,954.47	404,650.88	0.21	3.10
5,40	0.0	7.75	270.00	5,399.2	2,286.2	0.0	-16.9	855,943.67	404,650.88	0.58	3.10
5,50	0.0	7.75	270.00	5,498.3	2,385.3	0.0	-30.4	855,930.18	404,650.88	1.05	0.00
5,60	0.0	7.75	270.00	5,597.4	2,484.4	0.0	-43.9	855,916.70	404,650.88	1.51	0.00
5,70	0.0	7.75	270.00	5,696.5	2,583.5	0.0	-57.3	855,903.21	404,650.88	1.98	0.00
5,79	5.4	7.75	270.00	5,791.0	2,678.0	0.0	-70.2	855,890.35	404,650.88	2.42	0.00
Cherry C											
5,800	0.0	7.75	270.00	5,795.6	2,682.6	0.0	-70.8	855,889.73	404,650.88	2.44	0.00
5,900	0.0	7.75	270.00	5,894.7	2,781.7	0.0	-84.3	855,876.24	404,650.88	2.91	0.00



Wall Sigury 25 26 State Fod Com 211

Company: Project: Site: Well: Wellbore: Design:	sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H - Plan						Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:		Well Sioux 25-36 State Fed Com 21H WELL @ 3113.0usft (Original Well Elev) WELL @ 3113.0usft (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Db		
Planned Survey											
MD (usft)	Inc (°)	Azi (azimut (°)	h) TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)	
6,00	0.0	7.75 2	70.00 5,99	3.8 2,880	.8 0.0	-97.8	855,862.76	404,650.88	3.37	0.00	
6,10	0.0	7.75 2	70.00 6,09	2.8 2,979	.8 0.0	-111.3	855,849.27	404,650.88	3.84	0.00	
6,20	0.0	7.75 2	70.00 6,19	1.9 3,078	.9 0.0	-124.8	855,835.79	404,650.88	4.30	0.00	
6,30	0.0	7.75 2	70.00 6,29	1.0 3,178	.0 0.0	-138.2	855,822.30	404,650.88	4.77	0.00	
6,40	0.0	7.75 2	70.00 6,39	0.1 3,277	.1 0.0	-151.7	855,808.82	404,650.88	5.23	0.00	
6,50	0.0	7.75 2	70.00 6,48	9.2 3,376	.2 0.0	-165.2	855,795.33	404,650.88	5.69	0.00	
6,60	0.0	7.75 2	70.00 6,58	8.3 3,475	.3 0.0	-178.7	855,781.85	404,650.88	6.16	0.00	
6,70	0.0	7.75 2	70.00 6,68	3,574	.4 0.0	-192.2	855,768.36	404,650.88	6.62	0.00	
6,80	0.0	7.75 2	70.00 6,78	6.5 3,673	.5 0.0	-205.7	855,754.88	404,650.88	7.09	0.00	
6,90	0.0	7.75 2	70.00 6,88	5.5 3,772	.5 0.0	-219.2	855,741.39	404,650.88	7.55	0.00	
7,000	0.0	7.75 2	70.00 6,98	4.6 3,871	.6 0.0	-232.6	855,727.91	404,650.88	8.02	0.00	
7,10	0.0	7.75 2	70.00 7,08	3.7 3,970	.7 0.0	-246.1	855,714.42	404,650.88	8.48	0.00	
7,20	0.0	7.75 2	70.00 7,18	2.8 4,069	.8 0.0	-259.6	855,700.94	404,650.88	8.95	0.00	
7,30	0.0	7.75 2	70.00 7,28	4,168	.9 0.0	-273.1	855,687.45	404,650.88	9.41	0.00	
7,32	2.3	7.75 2	70.00 7,30	4.0 4,191	.0 0.0	-276.1	855,684.44	404,650.88	9.52	0.00	
Brushy C	Canyon										
7,40	0.0		70.00 7,38	4,268			855,673.97	404,650.88	9.88	0.00	
7,50	0.0	7.75 2	70.00 7,48	0.1 4,367	.1 0.0	-300.1	855,660.48	404,650.88	10.34	0.00	
7,60	0.0	7.75 2	70.00 7,57	9.1 4,466	.1 0.0	-313.6	855,647.00	404,650.88	10.81	0.00	
7,70	0.0	7.75 2	70.00 7,67	8.2 4,565	.2 0.0	-327.0	855,633.51	404,650.88	11.27	0.00	
7,80	0.0	7.75 2	70.00 7,77	7.3 4,664	.3 0.0	-340.5	855,620.03	404,650.88	11.74	0.00	
7,90	0.0	7.75 2	70.00 7,87	6.4 4,763	.4 0.0	-354.0	855,606.54	404,650.88	12.20	0.00	
8,000	0.0	7.75 2	70.00 7,97	4,862	.5 0.0	-367.5	855,593.06	404,650.88	12.67	0.00	
8,10	0.0	7.75 2	70.00 8,07	4.6 4,961	.6 0.0	-381.0	855,579.57	404,650.88	13.13	0.00	
8,20	0.0	7.75 2	70.00 8,17	3.7 5,060	.7 0.0	-394.5	855,566.09	404,650.88	13.60	0.00	
8,30	0.0	7.75 2	70.00 8,27	2.7 5,159	.7 0.0	-407.9	855,552.60	404,650.88	14.06	0.00	

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COMPASS 5000.1 Build 56

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Morcor Engineering Morcor Standard Plan

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9:12:19
AM

Company: Project: Site: Well: Wellbore: Design:	Sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H - Plan						Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:		Well Sioux 25-36 State Fed Com 21H WELL @ 3113.0usft (Original Well Elev) WELL @ 3113.0usft (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Db	
Planned Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
8,307			8,280.0	5,167.0	0.0	-408.9	855,551.61	404,650.88	14.10	0.00
Lower Br	ushy Canyon									
8,400	0.0 7.75	270.00	8,371.8	5,258.8	0.0	-421.4	855,539.12	404,650.88	14.53	0.00
8,500	0.0 7.75	270.00	8,470.9	5,357.9	0.0	-434.9	855,525.63	404,650.88	14.99	0.00
8,548	3.5 7.75	270.00	8,519.0	5,406.0	0.0	-441.5	855,519.09	404,650.88	15.22	0.00
Bone Spi	ring									
8,600	0.0 7.75	270.00	8,570.0	5,457.0	0.0	-448.4	855,512.14	404,650.88	15.46	0.00
8,700	0.0 7.75	270.00	8,669.1	5,556.1	0.0	-461.9	855,498.66	404,650.88	15.92	0.00
8,800	0.0 7.75	270.00	8,768.2	5,655.2	0.0	-475.4	855,485.17	404,650.88	16.39	0.00
8,900	0.0 7.75	270.00	8,867.3	5,754.3	0.0	-488.9	855,471.69	404,650.88	16.85	0.00
9,000	0.0 7.75	270.00	8,966.4	5,853.4	0.0	-502.3	855,458.20	404,650.88	17.31	0.00
9,100	0.0 4.65	270.00	9,065.8	5,952.8	0.0	-513.1	855,447.41	404,650.88	17.69	3.10
9,200	0.0 1.55	270.00	9,165.6	6,052.6	0.0	-518.6	855,442.00	404,650.88	17.87	3.10
9,250	0.0	0.00	9,215.6	6,102.6	0.0	-519.2	855,441.32	404,650.88	17.90	3.10
9,300	0.0	0.00	9,265.6	6,152.6	0.0	-519.2	855,441.32	404,650.88	17.90	0.00
9,400	0.0	0.00	9,365.6	6,252.6	0.0	-519.2	855,441.32	404,650.88	17.90	0.00
9,420	0.0	0.00	9,385.6	6,272.6	0.0	-519.2	855,441.32	404,650.88	17.90	0.00
9,500			9,465.3	6,352.3	-6.2	-519.1	855,441.41	404,644.73	24.04	11.04
9,600	.0 19.88	179.15	9,562.0	6,449.0	-30.9	-518.8	855,441.78	404,619.97	48.77	11.04
9,700	0.0 30.92	179.15	9,652.2	6,539.2	-73.7	-518.1	855,442.42	404,577.15	91.54	11.04
9,800	0.0 41.96	179.15	9,732.5	6,619.5	-133.0	-517.3	855,443.30	404,517.85	150.78	11.04
9,900	0.0 53.01	179.15	9,800.0	6,687.0	-206.6	-516.2	855,444.39	404 444 26	224.29	11.04
9,900			9,800.0 9,803.0	6,690.0	-200.8	-516.2	855,444.39 855,444.45	404,444.26 404,440.23	224.29	11.04
		179.10	9,003.0	0,090.0	-210.0	-510.1	000,444.40	404,440.23	220.31	11.04
1st BS Sa 10,000		5 179.15	9,852.1	6,739.1	-291.8	-514.9	855,445.65	404,359.11	309.34	11.04
10,100			9,887.0	6,774.0	-385.3	-513.5	855,447.04	404,265.56	402.79	11.04
10,200			9,903.3	6,790.3	-483.8	-512.0	855,448.50	404,167.06	501.18	11.04

Page 82

of 125



Company:

Project:

Site:

Well:

Caza Operating LLC

Sioux 25-36 State Fed Com 21H

Sioux 25-36 State Fed Com 21H

Sioux 25-36 State Fed Com 21H

Local Co-ordinate Reference:

Grid

TVD Reference:

MD Reference:

North Reference:

Well Sioux 25-36 State Fed Com 21H WELL @ 3113.0usft (Original Well Elev) WELL @ 3113.0usft (Original Well Elev)

Wellbore:	Sioux 25-36 State F					Survey Calculat		Minimum Curvatur	е	
Design:	Sioux 25-36 State F					Database:		EDM 5000.1 Single		
Planned Survey										
r lainteu Survey										
MD	Inc	Azi (azimuth)	TVD	TVDSS	N/S	E/W	Easting	Northing	V. Sec	DLeg
(usft) 10,23	(°) 5.0 90.0	(°) 179.15	(usft) 9,904.4	(usft) 6,791.4	(usft) -518.8	(usft) -511.5	(usft) 855,449.02	(usft) 404,132.09	(usft) 536.11	(°/100usft) 11.04
10,23			9,904.4 9,904.4	6,791.4	-583.8	-511.5	855,449.98	404,152.09	601.03	0.00
10,30			9,904.4	6,791.4	-583.8	-509.1	855,451.47	403,967.11	700.91	0.00
			9,904.4 9,904.4	*			,		800.79	
10,50				6,791.4	-783.8	-507.6	855,452.95	403,867.12		0.00
10,60	0.0 90.0	00 179.15	9,904.4	6,791.4	-883.7	-506.1	855,454.43	403,767.13	900.67	0.00
10,70	0.0 90.0	0 179.15	9,904.4	6,791.4	-983.7	-504.6	855,455.92	403,667.14	1,000.55	0.00
10,80	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,083.7	-503.1	855,457.40	403,567.15	1,100.42	0.00
10,90	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,183.7	-501.7	855,458.88	403,467.17	1,200.30	0.00
11,00	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,283.7	-500.2	855,460.37	403,367.18	1,300.18	0.00
11,10	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,383.7	-498.7	855,461.85	403,267.19	1,400.06	0.00
11,20	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,483.7	-497.2	855,463.33	403,167.20	1,499.94	0.00
11,30	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,583.7	-495.7	855,464.82	403,067.21	1,599.82	0.00
11,40	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,683.7	-494.2	855,466.30	402,967.22	1,699.70	0.00
11,50	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,783.6	-492.8	855,467.79	402,867.23	1,799.57	0.00
11,60	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,883.6	-491.3	855,469.27	402,767.24	1,899.45	0.00
11,70	0.0 90.0	0 179.15	9,904.4	6,791.4	-1,983.6	-489.8	855,470.75	402,667.25	1,999.33	0.00
11,80	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,083.6	-488.3	855,472.24	402,567.26	2,099.21	0.00
11,90	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,183.6	-486.8	855,473.72	402,467.28	2,199.09	0.00
12,00	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,283.6	-485.3	855,475.20	402,367.29	2,298.97	0.00
12,10	0.0 90.0	00 179.15	9,904.4	6,791.4	-2,383.6	-483.9	855,476.69	402,267.30	2,398.84	0.00
12,20	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,483.6	-482.4	855,478.17	402,167.31	2,498.72	0.00
12,30	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,583.6	-480.9	855,479.65	402,067.32	2,598.60	0.00
12,40	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,683.5	-479.4	855,481.14	401,967.33	2,698.48	0.00
12,50	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,783.5	-477.9	855,482.62	401,867.34	2,798.36	0.00
12,60	0.0 90.0	00 179.15	9,904.4	6,791.4	-2,883.5	-476.4	855,484.10	401,767.35	2,898.24	0.00
12,70	0.0 90.0	0 179.15	9,904.4	6,791.4	-2,983.5	-475.0	855,485.59	401,667.36	2,998.11	0.00
12,80	0.0 90.0	00 179.15	9,904.4	6,791.4	-3,083.5	-473.5	855,487.07	401,567.37	3,097.99	0.00

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Morcor Engineering Morcor Standard Plan

Received by OCD: 6/24/2022 9:12:19 AM

Company:Caza Operating LLCProject:Sioux 25-36 State Fed Com 21HSite:Sioux 25-36 State Fed Com 21HWell:Sioux 25-36 State Fed Com 21HWellbore:Sioux 25-36 State Fed Com 21HDesign:Sioux 25-36 State Fed Com 21H - Plan						Local Co-ordina TVD Reference: MD Reference: North Reference Survey Calculat Database:	e:	WELL @ 3113.0us		,
Planned Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
12,900	0.0 90.0	00 179.15	9,904.4	6,791.4	-3,183.5	-472.0	855,488.55	401,467.39	3,197.87	0.00
13,000	0.0 90.0	00 179.15	9,904.4	6,791.4	-3,283.5	-470.5	855,490.04	401,367.40	3,297.75	0.00
13,100	0.0 90.0	00 179.15	9,904.4	6,791.4	-3,383.5	-469.0	855,491.52	401,267.41	3,397.63	0.00
13,200	0.0 90.0	00 179.15	9,904.4	6,791.4	-3,483.5	-467.5	855,493.00	401,167.42	3,497.51	0.00
13,300			9,904.4	6,791.4	-3,583.5	-466.1	855,494.49	401,067.43	3,597.39	0.00
13,400			9,904.4	6,791.4	-3,683.4	-464.6	855,495.97	400,967.44	3,697.26	0.00
13,500			9,904.4	6,791.4	-3,783.4	-463.1	855,497.45	400,867.45	3,797.14	0.00
13,600).0 90.0	00 179.15	9,904.4	6,791.4	-3,883.4	-461.6	855,498.94	400,767.46	3,897.02	0.00
13,700	0.0 90.0	00 179.15	9,904.4	6,791.4	-3,983.4	-460.1	855,500.42	400,667.47	3,996.90	0.00
13,800	0.0 90.0		9,904.4	6,791.4	-4,083.4	-458.6	855,501.91	400,567.48	4,096.78	0.00
13,900	0.0 90.0	00 179.15	9,904.4	6,791.4	-4,183.4	-457.2	855,503.39	400,467.50	4,196.66	0.00
14,000	0.0 90.0	00 179.15	9,904.4	6,791.4	-4,283.4	-455.7	855,504.87	400,367.51	4,296.53	0.00
14,100).0 90.0	00 179.15	9,904.4	6,791.4	-4,383.4	-454.2	855,506.36	400,267.52	4,396.41	0.00
14,200	0.0 90.0	00 179.15	9,904.4	6,791.4	-4,483.4	-452.7	855,507.84	400,167.53	4,496.29	0.00
14,300	0.0 90.0	00 179.15	9,904.4	6,791.4	-4,583.3	-451.2	855,509.32	400,067.54	4,596.17	0.00
14,400	0.0 90.0	00 179.15	9,904.4	6,791.4	-4,683.3	-449.7	855,510.81	399,967.55	4,696.05	0.00
14,500	0.0 90.0	00 179.15	9,904.4	6,791.4	-4,783.3	-448.3	855,512.29	399,867.56	4,795.93	0.00
14,600).0 90.0	00 179.15	9,904.4	6,791.4	-4,883.3	-446.8	855,513.77	399,767.57	4,895.81	0.00
14,700	0.0 90.0	00 179.15	9,904.4	6,791.4	-4,983.3	-445.3	855,515.26	399,667.58	4,995.68	0.00
14,800	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,083.3	-443.8	855,516.74	399,567.59	5,095.56	0.00
14,900	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,183.3	-442.3	855,518.22	399,467.61	5,195.44	0.00
15,000	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,283.3	-440.8	855,519.71	399,367.62	5,295.32	0.00
15,100	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,383.3	-439.4	855,521.19	399,267.63	5,395.20	0.00
15,200	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,483.2	-437.9	855,522.67	399,167.64	5,495.08	0.00
15,300	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,583.2	-436.4	855,524.16	399,067.65	5,594.95	0.00
15,400	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,683.2	-434.9	855,525.64	398,967.66	5,694.83	0.00
15,500	0.0 90.0	00 179.15	9,904.4	6,791.4	-5,783.2	-433.4	855,527.12	398,867.67	5,794.71	0.00

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COMPASS 5000.1 Build 56



Caza Operating LLC

Sioux 25-36 State Fed Com 21H

Sioux 25-36 State Fed Com 21H

Sioux 25-36 State Fed Com 21H

Morcor Engineering Morcor Standard Plan

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Well Sioux 25-36 State Fed Com 21H WELL @ 3113.0usft (Original Well Elev) WELL @ 3113.0usft (Original Well Elev)

Grid

Wellbore: Design:	Sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H - Plan					Survey Calcula Database:	tion Method:	Minimum Curvatu EDM 5000.1 Sing		
Planned Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
15,600	.0 90	.00 179.15	9,904.	4 6,791.4	-5,883.2	-431.9	855,528.61	398,767.68	5,894.59	0.00
15,700	.0 90	.00 179.15	9,904.	4 6,791.4	-5,983.2	-430.5	855,530.09	398,667.69	5,994.47	0.00
15,800	.0 90	.00 179.15	9,904.	4 6,791.4	-6,083.2	-429.0	855,531.57	398,567.70	6,094.35	0.00
15,900	.0 90	.00 179.15	9,904.	4 6,791.4	-6,183.2	-427.5	855,533.06	398,467.72	6,194.23	0.00
16,000	.0 90	.00 179.15	9,904.	4 6,791.4	-6,283.2	-426.0	855,534.54	398,367.73	6,294.10	0.00
16,100	.0 90	.00 179.15	9,904.	4 6,791.4	-6,383.1	-424.5	855,536.03	398,267.74	6,393.98	0.00
16,200	.0 90	.00 179.15	9,904.	4 6,791.4	-6,483.1	-423.0	855,537.51	398,167.75	6,493.86	0.00
16,300	.0 90	.00 179.15	9,904.	4 6,791.4	-6,583.1	-421.6	855,538.99	398,067.76	6,593.74	0.00
16,400	.0 90	.00 179.15	9,904.	4 6,791.4	-6,683.1	-420.1	855,540.48	397,967.77	6,693.62	0.00
16,500	.0 90	.00 179.15	9,904.	4 6,791.4	-6,783.1	-418.6	855,541.96	397,867.78	6,793.50	0.00
16,600	.0 90	.00 179.15	9,904.	4 6,791.4	-6,883.1	-417.1	855,543.44	397,767.79	6,893.37	0.00
16,700	.0 90	.00 179.15	9,904.	4 6,791.4	-6,983.1	-415.6	855,544.93	397,667.80	6,993.25	0.00
16,800	.0 90	.00 179.15	9,904.	4 6,791.4	-7,083.1	-414.1	855,546.41	397,567.81	7,093.13	0.00
16,900	.0 90	.00 179.15	9,904.	4 6,791.4	-7,183.1	-412.7	855,547.89	397,467.83	7,193.01	0.00
17,000	.0 90	.00 179.15	9,904.	4 6,791.4	-7,283.0	-411.2	855,549.38	397,367.84	7,292.89	0.00
17,100	.0 90	.00 179.15	9,904.	4 6,791.4	-7,383.0	-409.7	855,550.86	397,267.85	7,392.77	0.00
17,200	.0 90	.00 179.15	9,904.	4 6,791.4	-7,483.0	-408.2	855,552.34	397,167.86	7,492.65	0.00
17,300	.0 90	.00 179.15	9,904.	4 6,791.4	-7,583.0	-406.7	855,553.83	397,067.87	7,592.52	0.00
17,400	.0 90	.00 179.15	9,904.	4 6,791.4	-7,683.0	-405.2	855,555.31	396,967.88	7,692.40	0.00
17,500	.0 90	.00 179.15	9,904.	4 6,791.4	-7,783.0	-403.8	855,556.79	396,867.89	7,792.28	0.00
17,600	.0 90	.00 179.15	9,904.	4 6,791.4	-7,883.0	-402.3	855,558.28	396,767.90	7,892.16	0.00
17,700	.0 90	.00 179.15	9,904.	4 6,791.4	-7,983.0	-400.8	855,559.76	396,667.91	7,992.04	0.00
17,800	.0 90	.00 179.15	9,904.	4 6,791.4	-8,083.0	-399.3	855,561.24	396,567.92	8,091.92	0.00
17,900	.0 90	.00 179.15	9,904.	4 6,791.4	-8,182.9	-397.8	855,562.73	396,467.94	8,191.79	0.00
18,000	.0 90	.00 179.15	9,904.	4 6,791.4	-8,282.9	-396.3	855,564.21	396,367.95	8,291.67	0.00
18,100	.0 90	.00 179.15	9,904.	4 6,791.4	-8,382.9	-394.9	855,565.69	396,267.96	8,391.55	0.00
18,200	.0 90	.00 179.15	9,904.	4 6,791.4	-8,482.9	-393.4	855,567.18	396,167.97	8,491.43	0.00

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	24/2022
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roject: S ite: S /ell: S /ellbore: S	Caza Operating LLC Sioux 25-36 State Fed Sioux 25-36 State Fed Sioux 25-36 State Fed Sioux 25-36 State Fed Sioux 25-36 State Fed	l Com 21H l Com 21H l Com 21H				Local Co-ordina TVD Reference: MD Reference: North Reference Survey Calculat Database:	:	WELL @ 3113.0us		,
anned Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
18,300.0	90.00	179.15	9,904.4	6,791.4	-8,582.9	-391.9	855,568.66	396,067.98	8,591.31	0.00
18,400.0	90.00	179.15	9,904.4	6,791.4	-8,682.9	-390.4	855,570.15	395,967.99	8,691.19	0.00
18,500.0	90.00	179.15	9,904.4	6,791.4	-8,782.9	-388.9	855,571.63	395,868.00	8,791.07	0.00
18,600.0	90.00	179.15	9,904.4	6,791.4	-8,882.9	-387.4	855,573.11	395,768.01	8,890.94	0.00
18,700.0	90.00	179.15	9,904.4	6,791.4	-8,982.9	-386.0	855,574.60	395,668.02	8,990.82	0.00
18,800.0	90.00	179.15	9,904.4	6,791.4	-9,082.8	-384.5	855,576.08	395,568.03	9,090.70	0.00
18,900.0	90.00	179.15	9,904.4	6,791.4	-9,182.8	-383.0	855,577.56	395,468.05	9,190.58	0.00
19,000.0	90.00	179.15	9,904.4	6,791.4	-9,282.8	-381.5	855,579.05	395,368.06	9,290.46	0.00
19,100.0	90.00	179.15	9,904.4	6,791.4	-9,382.8	-380.0	855,580.53	395,268.07	9,390.34	0.00
19,200.0	90.00	179.15	9,904.4	6,791.4	-9,482.8	-378.5	855,582.01	395,168.08	9,490.21	0.00
19,300.0	90.00	179.15	9,904.4	6,791.4	-9,582.8	-377.1	855,583.50	395,068.09	9,590.09	0.00
19,400.0	90.00	179.15	9,904.4	6,791.4	-9,682.8	-375.6	855,584.98	394,968.10	9,689.97	0.00
19,500.0	90.00	179.15	9,904.4	6,791.4	-9,782.8	-374.1	855,586.46	394,868.11	9,789.85	0.00
19,600.0	90.00	179.15	9,904.4	6,791.4	-9,882.8	-372.6	855,587.95	394,768.12	9,889.73	0.00
19,700.0	90.00	179.15	9,904.4	6,791.4	-9,982.7	-371.1	855,589.43	394,668.13	9,989.61	0.00
19,800.0	90.00	179.15	9,904.4	6,791.4	-10,082.7	-369.6	855,590.91	394,568.14	10,089.48	0.00
19,900.0	90.00	179.15	9,904.4	6,791.4	-10,182.7	-368.2	855,592.40	394,468.16	10,189.36	0.00
20,000.0	90.00	179.15	9,904.4	6,791.4	-10,282.7	-366.7	855,593.88	394,368.17	10,289.24	0.00
20,100.0	90.00	179.15	9,904.4	6,791.4	-10,382.7	-365.2	855,595.36	394,268.18	10,389.12	0.00
20,200.0	90.00	179.15	9,904.4	6,791.4	-10,482.7	-363.7	855,596.85	394,168.19	10,489.00	0.00
20,244.0	90.00	179.15	9,904.4	6,791.4	-10,526.7	-363.0	855,597.50	394,124.19	10,532.95	0.00



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Company: Project: Site: Well: Wellbore: Design:	Caza Operating LLC Sioux 25-36 State Fed Com 21H Sioux 25-36 State Fed Com 21H - Plan		21H 21H 21H		Local G TVD Re MD Re North I Survey Databa		: Well Sioux 25-36 State Fed Com 21H WELL @ 3113.0usft (Original Well Elev) WELL @ 3113.0usft (Original Well Elev) Grid Minimum Curvature EDM 5000.1 Single User Db
Formations							
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	3,801.0	3,801.0	Queen		0.00		
	9,905.0	9,803.0	1st BS Sand		0.00		
	4,177.0	4,177.0	Grayburg		0.00		
	5,019.0		Delaware		0.00		
	8,307.3	8,280.0	Lower Brushy Canyon		0.00		
	7,322.3		Brushy Canyon		0.00		
	3,113.0		Top of Salt		0.00		
	3,385.0	3,385.0			0.00		
	3,254.0	3,254.0			0.00		
	3,575.0		Seven Rivers		0.00		
	8,548.5		Bone Spring		0.00		
	4,625.0		San Andres		0.00		
	5,795.4	5,791.0	Cherry Canyon		0.00		

0.00

Checked By:

932.0

932.0 Rustler

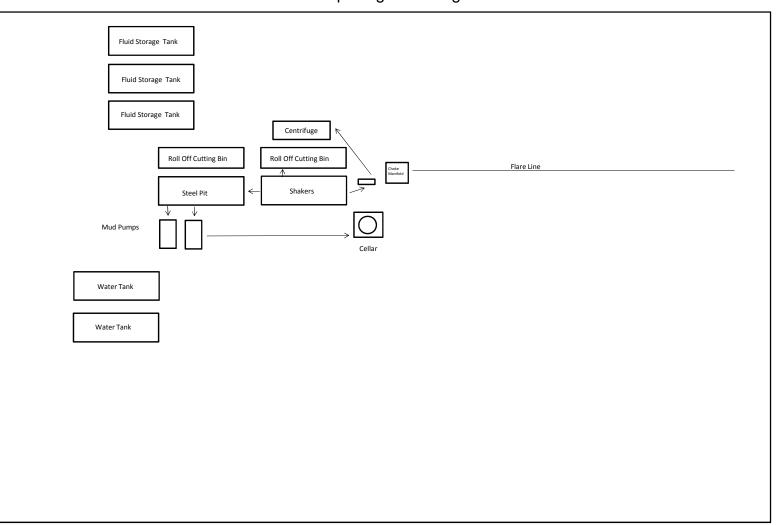
Approved By:

Date:

Closed Loop Diagram Design Plan

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Design Plan, Operating Plan and Maintenance Plan, and Closure Plan for the OCD form C-144

Design Plan:

Fluid and cuttings coming from drilling operations will pass over the shale shaker with the cuttings going to the haul off bin and the cleaned fluid returning to the working steel pits.

Equipment Includes:

1-670bbl steel working pit
2-100bbl steel working suction pits
2-500bbl steel tanks
2-20yd³ steel haul off bins
2-pumps (HHF-1600)
2-Shale shakers
1-Centrifuge
1-Desilter/Desander

Operating and Maintenance Plan:

Inspection to occur every tour for proper operation of system and individual components. If any problems are found they will be repaired and/or corrected immediately.

Closure Plan:

All haul off bins containing cuttings will be removed from location and hauled to R-360 (NM-01-0006) disposal site located 30 miles east of Carlsbad.

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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: 5/19/2021

Original

Operator & OGRID No.: 249099

□ 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
Sioux 25-36 State Fed Com 21H		B-25-25S-35E	93'FNL 1389'FEL	1000	flared	

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 to <u>Verdsado</u> and will be connected to <u>Versado</u> low/high pressure gathering system located in Lea County, New Mexico. It will require 1000' of pipeline to connect the facility to low/high pressure gathering system. <u>Caza</u> provides (periodically) to <u>Versado</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Caza</u> and <u>Versado</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Versado</u> Processing Plant located in Sec.29, Twn.21S, Rng.37E, Lea 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>Versado</u> system at that time. Based on current information, it is <u>Caza's</u> 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

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
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

United States Department of the Interior Bureau of Land Management CARLSBAD FIELD OFFICE 620 E. GREENE

CARLSBAD, NM 88220 -6292 Phone: (575) 234-5972 Receipt

No:

4849809

Transaction #: 4978154 Date of Transaction: 12/10/2020

CUSTOMER:

CAZA OPERATING LLC 200 N LORAINE ST STE 1550 MIDLAND,TX 79701-4765 US

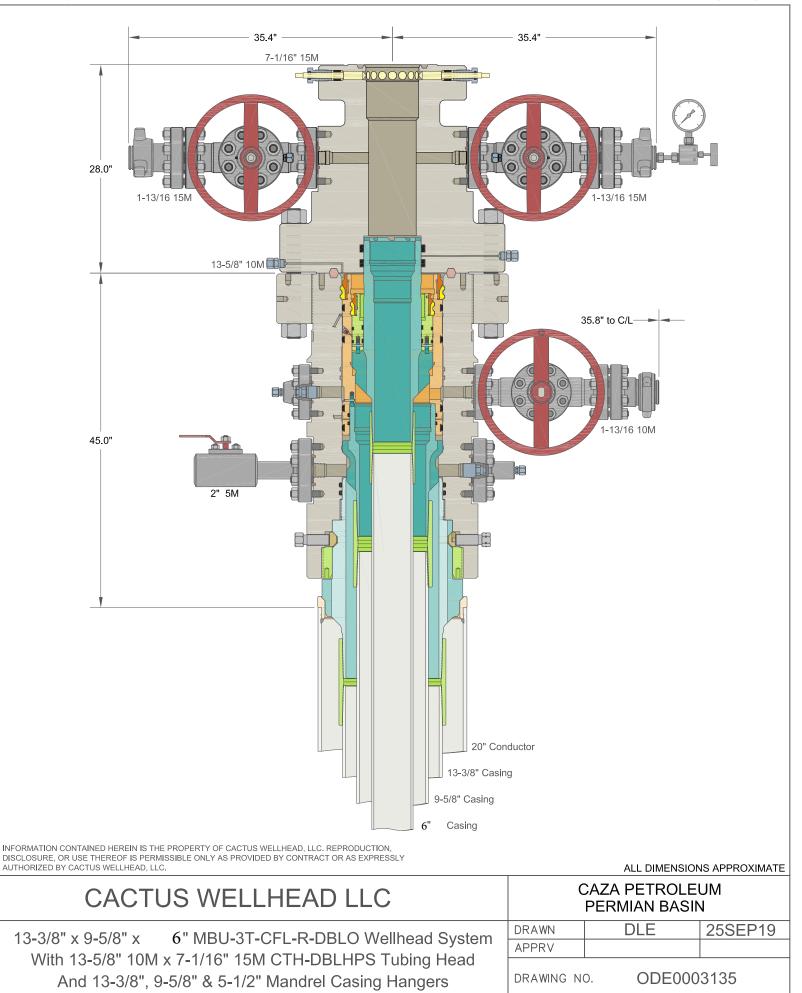
LINE #	QTY	DESCRIPTION	REMARKS	UNIT PRICE	TOTAL
1	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 14H	- n/a -	7770.00
2	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	SIOUX 25-36 STATE FED COM 14H	- n/a -	2590.00
3	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 15H	- n/a -	7770.00
4	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	SIOUX 25-36 STATE FED COM 15H	- n/a -	2590.00
5	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 16H	- n/a -	7770.00
6	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	SIOUX 25-36 STATE FED COM 16H	- n/a -	2590.00
7	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 17H	- n/a -	7770.00
8	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	SIOUX 25-36 STATE FED COM 17H	- n/a -	2590.00
9	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 20H	- n/a -	7770.00
		OIL & GAS / APPLICATION FOR	SIOUX 25-36		

10	1.00	PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	STATE FED COM 20H	- n/a -	2590.00	
11	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 21H	- n/a -	7770.00	
12	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	SIOUX 25-36 STATE FED COM 21H	- n/a -	2590.00	
13	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 22H	- n/a -	7770.00	
14	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	SIOUX 25-36 STATE FED COM 22H	- n/a -	2590.00	
15	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE	SIOUX 25-36 STATE FED COM 23H	- n/a -	7770.00	
16	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE - BW ALLOCATION	SIOUX 25-36 STATE FED COM 23H	- n/a -	2590.00	
	TOTAL: \$82,880.00					

	PAYMENT INFORMATION							
1	AMOUNT:	82880.00	POSTMARKED:	12/10/2020				
	TYPE:	CHECK	RECEIVED:	12/10/2020				
	CHECK NO:	55193						
		CAZA OPERATING LLC 200 N LORAINE ST STE 1550 MIDLAND TX 79701-4765 US						

REMARKS

This receipt was generated by the automated BLM Collections and Billing System and is a paper representation of a portion of the official electronic record contained therein.



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WAFMSS

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

APD ID: 10400066301

Operator Name: CAZA OPERATING LLC Well Name: SIOUX 25-36 STATE FED COM Well Type: OIL WELL

Submission Date: 05/19/2021

Well Number: 21H Well Work Type: Drill Highlighted data reflects the most recent changes

SUPO Data Report

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Sioux_25_36_State_Fed_Com_21H___Existing_Road_Map_20210519001916.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

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? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Sioux_25_36_State_Fed_Com_21H___1_Mile_Radius_20210519002028.pdf

09/21/2021

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Central tank battery previously approved. Tankage will be added as needed. Each well will have a 3 phase metered separator and FWKO. **Production Facilities map:**

Sioux_25_36_State_Fed_Com_21H___SIOUX_CENTRAL_TANK_BATTERY_20210519002130.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: GW WELL

Water source use type: SURFACE CASING

STIMULATION

INTERMEDIATE/PRODUCTION CASING

Source latitude: 32.107143

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: PRIVATE	
Water source volume (barrels): 400000	Source volume (acre-feet): 51.55723853
Source volume (gal): 16800000	

Water source and transportation map:

Sioux_25_36_State_Fed_Com_21H___Water_Supply_and_Caliche_Map_20210519002353.pdf

Water source comments: S30 T25S R36E NENW

New water well? N

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Source longitude: -103.30588

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

(
Well target aquifer:	
Est. depth to top of aquifer(ft):	Est thickness of aquifer:
Aquifer comments:	
Aquifer documentation:	
Well depth (ft):	Well casing type:
Well casing outside diameter (in.):	Well casing inside diameter (in.):
New water well casing?	Used casing source:
Drilling method:	Drill material:
Grout material:	Grout depth:
Casing length (ft.):	Casing top depth (ft.):
Well Production type:	Completion Method:
Water well additional information:	
State appropriation permit:	
Additional information attachment:	
Section 6 - Construction M	laterials
Using any construction materials: NO	

Construction Materials description:

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING Waste content description: drill cuttings Amount of waste: 1163460 pounds Waste disposal frequency : Daily Safe containment description: roll off bins Safe containmant attachment: Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE FACILITY Disposal type description: Disposal location description: R360 State approved commercial facility

Waste type: SEWAGEWaste content description: onsite housing sewageAmount of waste: 300gallons

Waste disposal frequency : Daily

1	Received by OCD: 6/24/2022 9:12:19 AM
	Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Safe containment description: closed septic system

Safe containmant attachment:

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

Disposal location description: Hobbs Waste Water Management

Waste type: GARBAGE

Waste content description: onsite housing trash

Amount of waste: 100 pounds

Waste disposal frequency : Daily

Safe containment description: steel trash trailer

Safe containmant attachment:

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

Disposal type description:

Disposal location description: State approved Eunice landfill

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? $\ensuremath{\mathbb{N}}$

Description of cuttings location

Cuttings area length (ft.)

Cuttings area depth (ft.)

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

Cuttings area width (ft.)

Cuttings area volume (cu. yd.)

Page 4 of 9

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Sioux_25_36_State_Fed_Com_21H___Location_Map_20210519003022.pdf Sioux_25_36_State_Fed_Com_21H___Well_Location_Plat_20210519003026.pdf Sioux_25_36_State_Fed_Com_21H___Well_Pad_Plat_20210519003030.pdf **Comments:**

Section 10 - Plans for Surface Reclamation

Type of disturbance: No New Surface Disturbance Multiple Well Pad Name: Sioux 25-36 State Fed Com Multiple Well Pad Number: 8H

Recontouring attachment:

Drainage/Erosion control construction: Per BLM instructions as identified during onsite

Drainage/Erosion control reclamation: Per BLM instructions as identified during onsite

Well pad proposed disturbance	Well pad interim reclamation (acres): 0 Well pad long term disturbance	
(acres): Road proposed disturbance (acres):	Road interim reclamation (acres): 0	(acres): 0 Road long term disturbance (acres): 0
Powerline proposed disturbance (acres): Pipeline proposed disturbance (acres): Other proposed disturbance (acres): Total proposed disturbance: 0	Powerline interim reclamation (acres): 0 Pipeline interim reclamation (acres): 0 Other interim reclamation (acres): 0 Total interim reclamation: 0	(acres): 0

Disturbance Comments:

Reconstruction method: Interim reclamation as identified during onsite

Topsoil redistribution: Interim reclamation as identified during onsite

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Soil treatment: Interim reclamation as identified during onsite Existing Vegetation at the well pad: Sage brush and native grasses Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Sage brush and native grasses Existing Vegetation Community at the road attachment: Existing Vegetation Community at the pipeline: Sage brush and native grasses Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Sage brush and native grasses Existing Vegetation Community at other disturbances attachment:

Non native seed used? N Non native seed description: Seedling transplant description: Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N Seed harvest description: Seed harvest description attachment:

Seed Management

Seed Table

Seed Summary

Seed Type Pounds/Acre **Total pounds/Acre:**

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Steve

Phone: (198)541-5972

Last Name: Morris

Email: steve.morris@morcorengineering.com

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Seed BMP: As identified during onsite Seed BMP: As identified during onsite Seed method: Broadcast followed by a drag chain Existing invasive species? N Existing invasive species treatment description: Existing invasive species treatment attachment: Weed treatment plan description: Spray for cheat grass Weed treatment plan attachment: Monitoring plan description: Visual inspection in spring and late fall Monitoring plan attachment: Success standards: 80% coverage by 2nd growing season of native species with less than 5% invasive species Pit closure description: no pits Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD Describe: Surface Owner: PRIVATE OWNERSHIP Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: Military Local Office: USFWS Local Office: USFWS Local Office: USFS Region: USFS Forest/Grassland:

USFS Ranger District:

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Fee Owner: Fee Owner Depercated

Phone: (999)999-9999

Fee Owner Address:

Email: none@aol.com

Surface use plan certification: YES

Surface use plan certification document:

Sioux_25_36_State_Fed_Com_21H___Surface_use_plan_of_operations_certification_signed_20210519003411.pd

Use APD as ROW? N

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Fee per well drilled

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? Y ROW Type(s):

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? Y

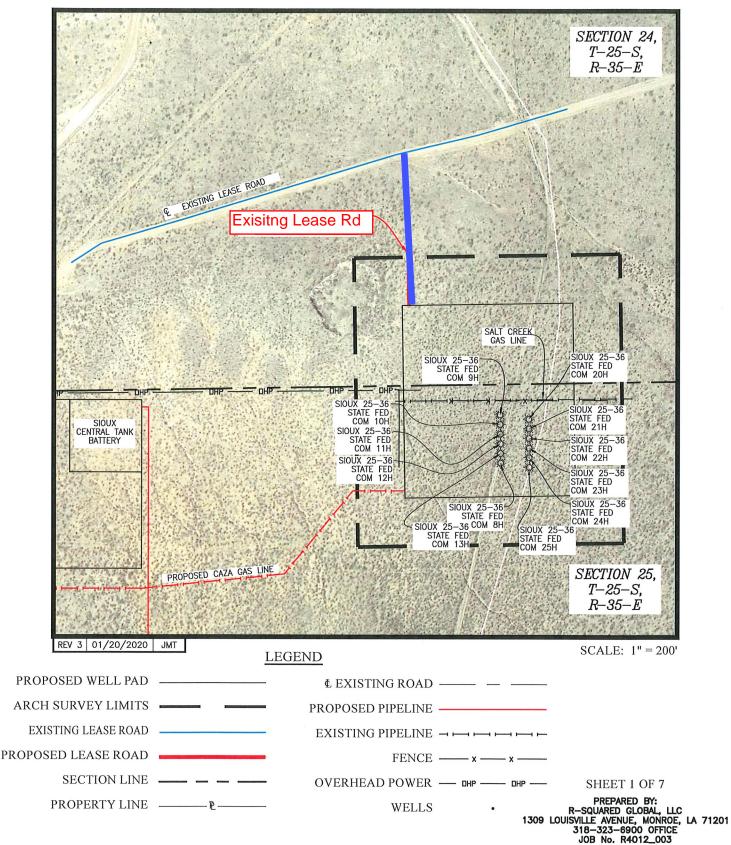
Previous Onsite information: Sioux 25-36 State Fed Com 8H

Other SUPO Attachment

Sioux_25_36_State_Fed_Com_21H___Closed_Loop_Diagram_Design_Plan_20210519003846.pdf Sioux_25_36_State_Fed_Com_21H___Closed_Loop_Design_Operating_and_Closure_Plan_20210519003846.pdf Sioux_25_36_State_Fed_Com_21H___Location_Verification_Map_20210519003850.pdf Sioux_25_36_State_Fed_Com_21H___Gas_Capture_Plan_20210519003853.pdf Sioux_25_36_State_Fed_Com_21H___Vicinity_Map_20210519003855.pdf Sioux_25_36_State_Fed_Com_21H___IR_Plat_20210519003857.pdf Received by OCD: 6/24/2022 9:12:19 AM

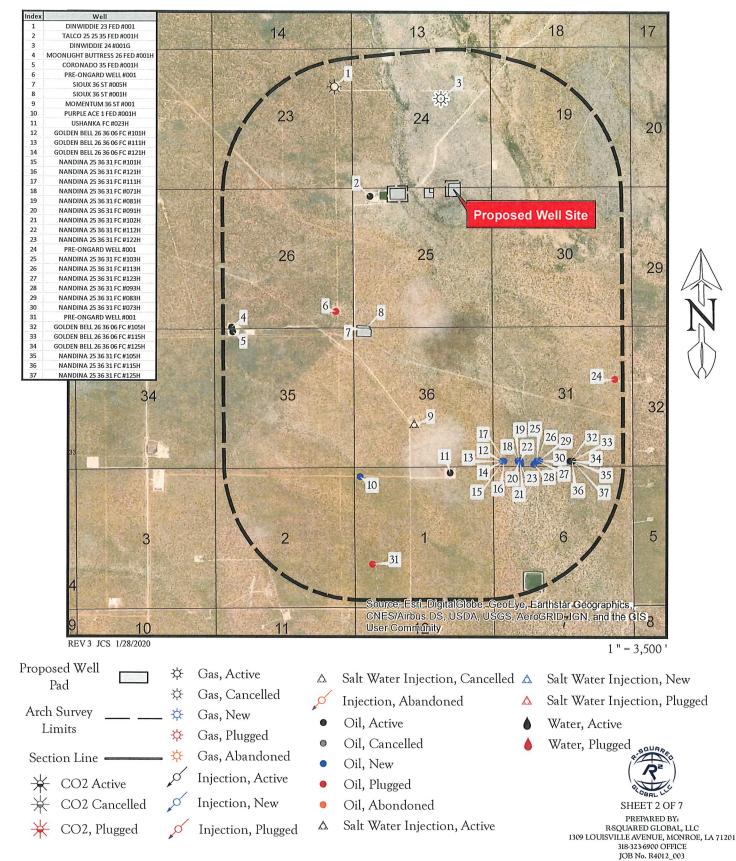
EXISTING ACCESS ROADS

SIOUX 25-36 STATE FED COM SEC. 24 & 25 TWP. 25-S RGE. 35-E SURVEY: N.M.P.M. COUNTY: LEA OPERATOR: CAZA OPERATING, LLC U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, N.M.



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ONE-MILE RADIUS MAP SIOUX 25-36 STATE FED COM SEC. 25 TWP. 25-S RGE. 35-E SURVEY: N.M.P.M. COUNTY: LEA OPERATOR: CAZA OPERATING, LLC U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, NM,TX.



Received by OCD: 6/24/2022 9:12:19 AM

EXHIBIT "A"

NM-LE-0003.00000 LEA COUNTY, NEW MEXICO SIOUX CENTRAL TANK BATTERY PROPOSED CRUDE FLOWLINE CAZA OPERATING, LLC

SHEET 1 OF 2

FIELD NOTES DESCRIBING

The centerline of a 30 foot wide proposed permanent easement, being 0.55 acres of land. Said easement being located in Section 25, Township 25 South, Range 35 East, New Mexico Principal Meridian, Lea County, New Mexico.

Being more particularly described as lying 15 feet on each side of the following described centerline, unless otherwise shown (see Detail "A" on sheet 2 of 2):

 $B\!EGINNING$ at a point from which a 1 inch iron pipe with GLO cap found for the North Quarter corner of said Section 25 bears N 78°32'32" W a distance of 1,026.13 feet.

THENCE crossing said Section 25 the following courses and distances: S 49°20'56" W a distance of 3.83 feet, S 63°03'50" W a distance of 41.02 feet, S 04°09'46" W a distance of 94.97 feet, S 83°39'43" W a distance of 513.76 feet, S 86°34'25" W a distance of 129.62 feet, and N 00°02'34" E a distance of 20.04 feet to the *POINT OF TERMINATION* from which a 1 inch iron pipe with GLO cap found for the West Quarter corner of said Section 25 bears S 51°44'50" W a distance of 3,737.94 feet.

The total length of the herein described proposed permanent easement crossing said Section 25, being 803.24 feet (48.68 rods), containing 0.55 acres of land.

The edges of the permanent easement are parallel with the centerline of the easement until reaching the boundaries of the subject tract of land, unless otherwise shown.

All bearings and coordinates refer to NAD 83, New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet. (All bearings, distances, coordinates, and areas are based on grid measurements utilizing a combined scale factor of 0.99987673, convergence angle of 0.53882500°).

Title information furnished by Caza Operating, LLC.

Reference accompanying Certificate of Survey prepared in conjunction with this legal description for easement.

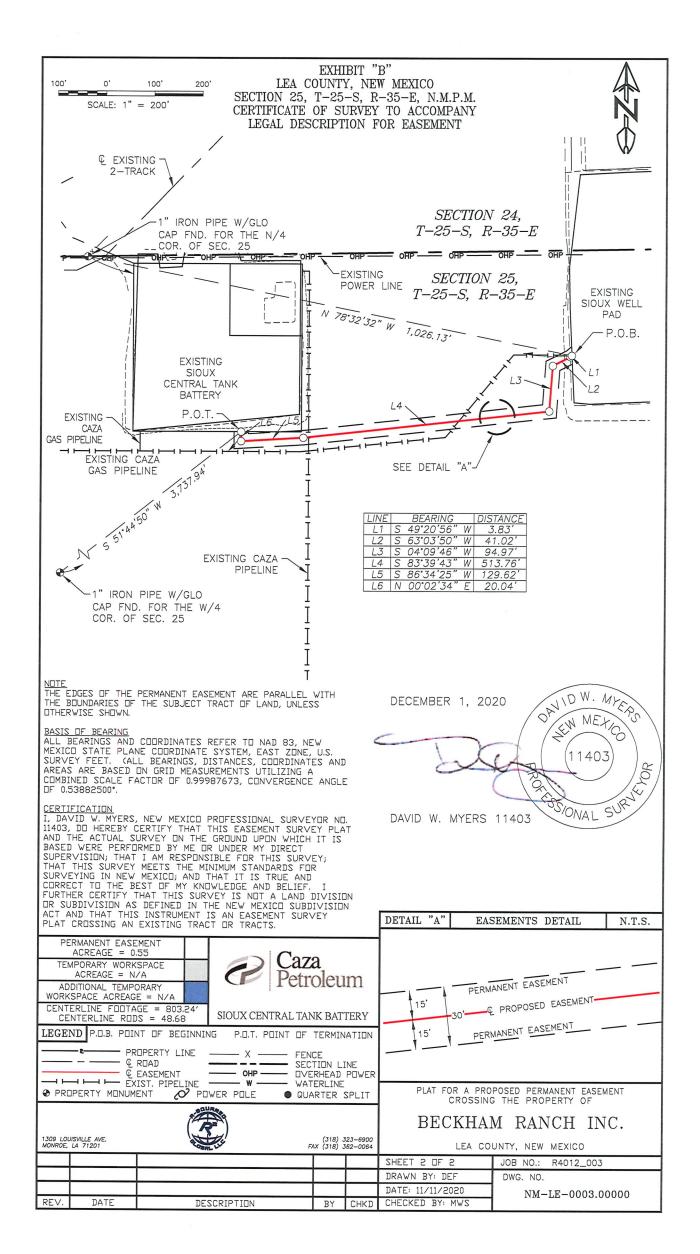
STATE OF NEW MEXICO

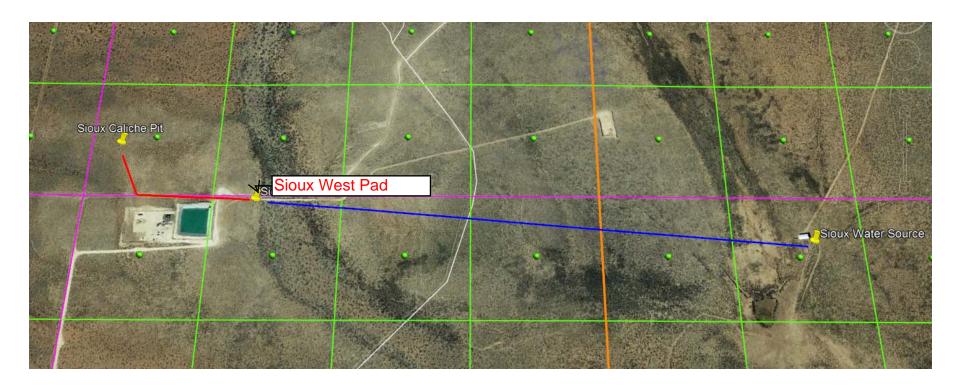
COUNTY OF LEA

I, David W. Myers, New Mexico Professional Surveyor No. 11403, do hereby certify that this easement survey plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the minimum standards for surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief. I further certify that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act and that this instrument is an easement survey plat crossing an existing tract or tracts.

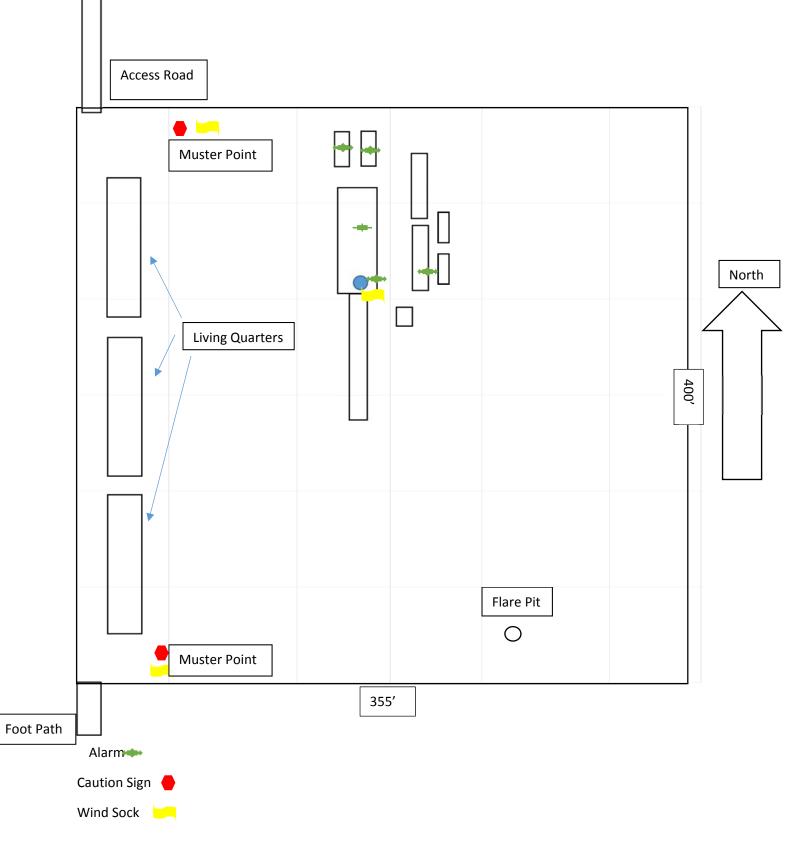
ON ID W. MEEPS DECEMBER 1, 2020 SEW METC 11403 õ STIONAL SUF DAVID W. MYERS 11403

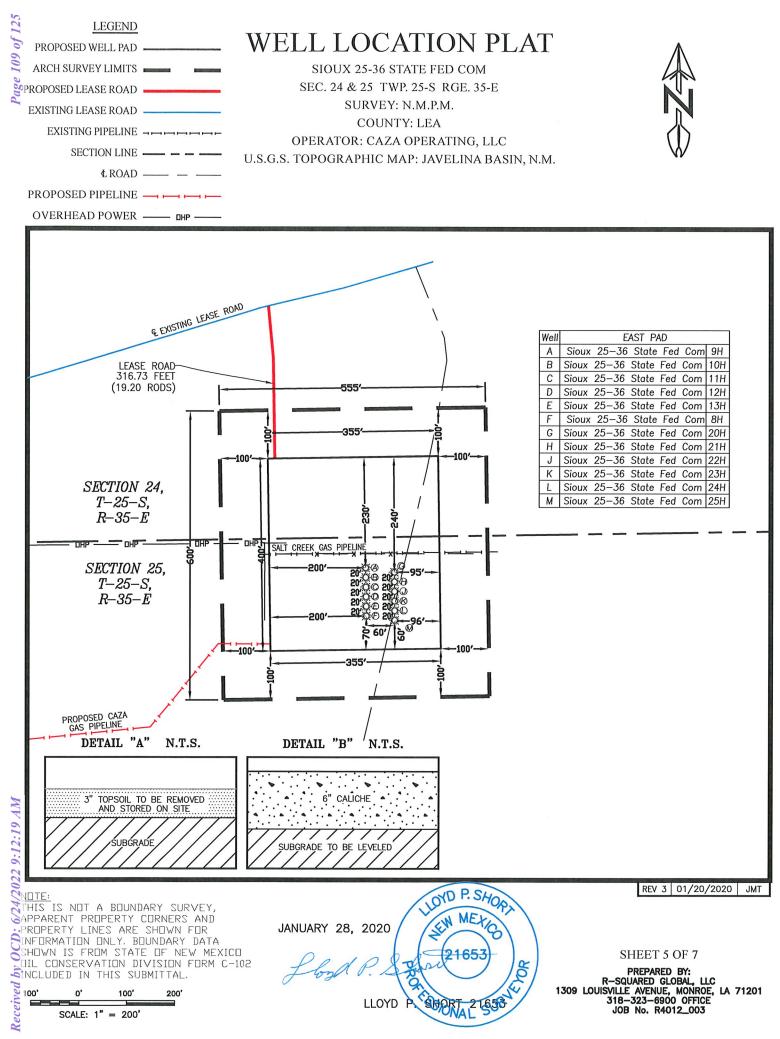
R-SQUARED GLOBAL, LLC PROJECT NO. R4012_003 Modification in any way of the foregoing description terminates liability of Surveyor.





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Received by OCD: 6/24/2022 9:12:19 AM
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WELL LOCATION PLAT

SIOUX 25-36 STATE FED COM SEC. 24 & 25 TWP. 25-S RGE. 35-E SURVEY: N.M.P.M. COUNTY: LEA OPERATOR: CAZA OPERATING, LLC U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, N.M.

SIDUX 25-36 STATE FED COM 9H CAZA DPERATING, LLC 63' FNL 1,449' FEL, SECTION 25 NAD 83, SPCS NM EAST X:855900.09' / Y:404679.81' LAT:32.10846890N/ LDN:103.31740172W NAD 27, SPCS NM EAST X814712.79' / Y1404621.56' LAT:32.10834194N / LDN:103.31693978W ELEVATION = 3087'

SIDUX 25-36 STATE FED COM 13H CAZA DPERATING, LLC 143' FNL 1,449' FEL, SECTION 25 NAD 83, SPCS NM EAST X:855901.35' / Y:404699.79' LAT:32.10824894N/ LON103.31740009W NAD 27, SPCS NM EAST X:814714.05' / Y:404541.55' LAT:32.10812198N / LDN:103.31693816W ELEVATION = 3085'

SIDUX 25-36 STATE FED COM 8H CAZA DPERATING, LLC 163' FNL 1,449' FEL, SECTION 25 NAD 83, SPCS NN EAST X:855899.70' / Y:404699.79' LAT:32.10852385N/ LDN:103.31740235W NAD 27, SPCS NH EAST X:814712.41' / Y:404641.55' LAT:32.10839689N / LDN:103.31694041W

83'

SIDUX 25-36 STATE FED COM 10H

NAD 83, SPCS NM EAST X:855900.40' / Y:404659.84' LAT:32.10841402N/ LDN:103.31740133W

NAD 27, SPCS NN EAST X:814713.10' / Y:404601.60' LAT:32.10828706N / LDN:103.31693940W

ELEVATION = 3086

ELEVATION = 3087

CAZA OPERATING, LLC FNL 1,449' FEL, SECTION 25

CAZA DPERATING, LLC 103' FNL 1,449' FEL, SECTION 25 NAD 83, SPCS NM EAST XI855900.79' / YI404639.85' LAT:32.10835906N/ LONI03.31740067W NAD 27, SPCS NM EAST X:814713.49' / Y:404581.60' LAT:32.10823210N / LDN:103.31693873W ELEVATION = 3086'

SIDUX 25-36 STATE FED COM 11H

SIDUX 25-36 STATE FED COM 20H CAZA OPERATING, LLC CAZA OPERATING, LLC 73' FNL 1,389' FEL, SECTION 25 NAD 83, SPCS NM EAST X:855960.36' / Y:404670.87' LAT:32.10844279N/ LON103.31720735W NAD 27, SPCS NM EAST X:814773.07' / Y:404612.63' LAT:32.10831583N / LEN:103.31674541W ELEVATION = 3090'

SIDUX 25-36 STATE FED CDM 12H CAZA DPERATING, LLC 123' FNL 1,449' FEL, SECTION 25 NAD 83, SPCS NM EAST X:855901.01' / Y:404619.78' LAT:32.10830391N/ LDN:103.31740056W NAD 27, SPCS NN EAST X:814713.72' / Y:404561.54' LAT:32.10817695N / LDN:103.31693863W ELEVATION = 3085'

SIGUX 25-36 STATE FED COM 21H CAZA OPERATING, LLC 93' FNL 1,389' FEL, SECTION 25 NAD 83, SPCS NN EAST X:055960.55' / Y:404650.88' LAT:32.10838782N/ LDN:103.31720735W NAD 27, SPCS NN EAST X/814773.26' / Y/404592.63' LAT/32.10826086N / L0N/103.31674542W ELEVATION = 3090'

SIDUX 25-36 STATE FED CIM 22H CAZA DPERATING, LLC 113' FNL 1,389' FEL, SECTION 25 NAD 83, SPCS NM EAST X:055960.74' / Y1404630.88' LAT:32.10833284N/ LDN:03.31720735W NAD 27, SPCS NM EAST X814773,44' / Y1404572,63' LAT:32.10820588N / LDN:103,31674542W ELEVATION = 3090'

SIDUX 25-36 STATE FED COM 23H CAZA OPERATING, LLC 133' FNL 1,389' FEL, SECTION 25 NAD 83, SPCS NN EAST X:855960.93' / Y:404610.88' LAT:32.10827787N/ LDN:103.31720735W NAD 27, SPCS NM EAST XI814773.63' / YI404552.63' LATI32.10815091N / LON103.31674543W ELEVATION = 3090'

SIDUX 25-36 STATE FED COM 24H SIDUX 25-36 STATE FED CUM 24H CAZA DPERATING, LLC 153' FNL 1,389' FEL, SECTIDN 25 NAD 83, SPCS NM EAST X:855961.12' / Y:404590.88' LAT:32.10822289N/ LDN103.31720735W NAD 27, SPCS NM EAST Y:01472.92' / Y:404532.63' X814773.82' / Y1404532.63' LAT:32.10809593N / L0N:103.31674543W ELEVATION = 3090'

SIOUX 25-36 STATE FED COM 25H SIDUX 25-36 STATE FED COM 25H CAZA DPERATING, LLC 173' FNL 1,389' FEL, SECTIDN 25 NAD 83, SPCS NM EAST X:855961.31' / Y:404570.88' LAT:32.10816792N/ LDN:103.31720735W NAD 27, SPCS NM EAST X:814774.01' / Y:404512.64' LAT:32.10804096N / LDN:103.31674543W ELEVATION = 3090' ELEVATION = 3090'

PM

OND P. SHOP HIS IS NOT A BOUNDARY SURVEY, EN METIC PPARENT PROPERTY CORNERS AND ROPERTY LINES ARE SHOWN FOR JANUARY 28, 2020 PROPERTY LINES ARE SHOWN FOR SHOWN IS FROM STATE OF NEW MEXICO 2165 IL CONSERVATION DIVISION FORM C-102 R C Flora Π ANCLUDED IN THIS SUBMITTAL. tox. 0' 100' 200' SHORAL 21653 LLOYD

Received 100, SCALE: 1'' = 200'

AM

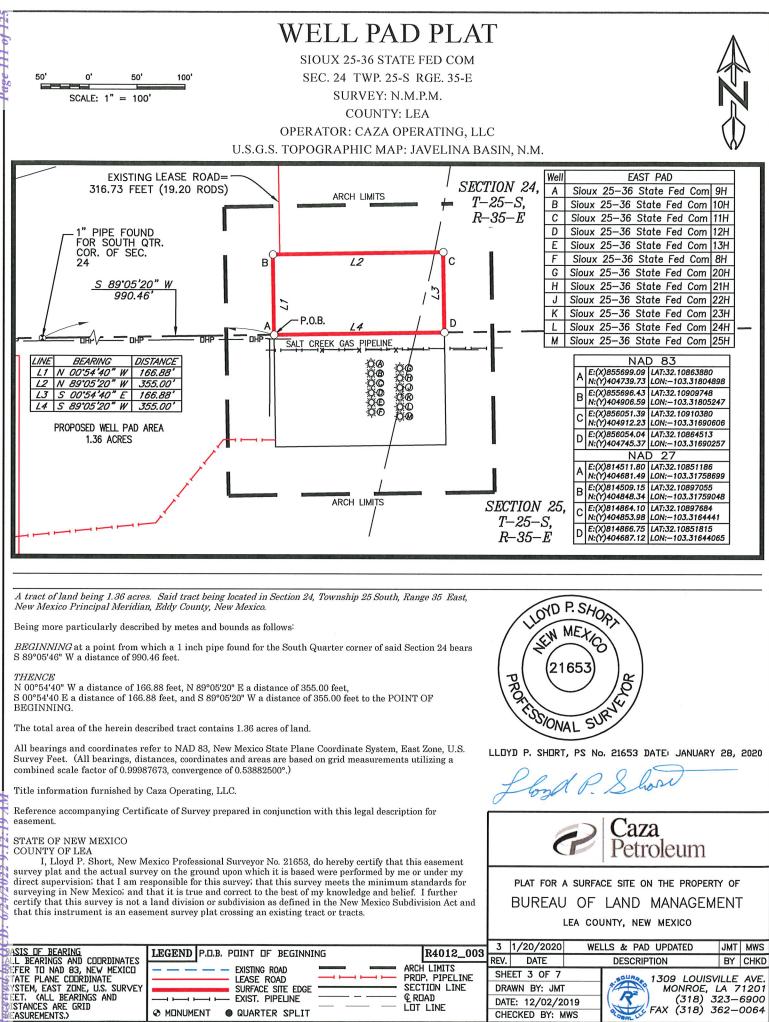
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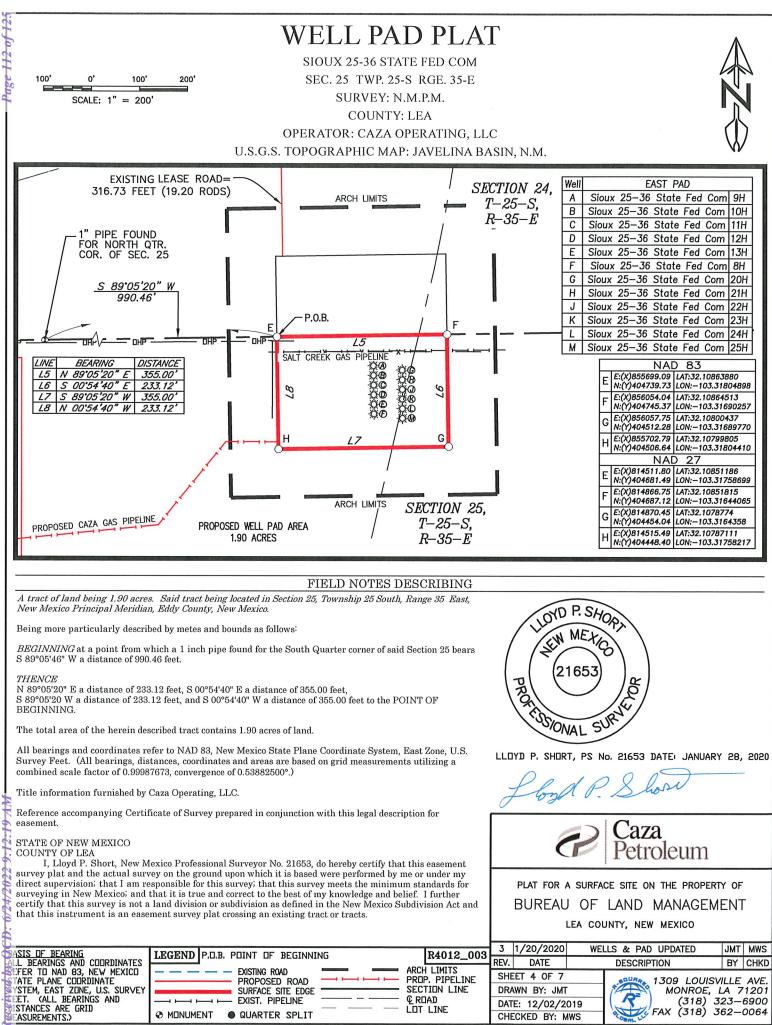
6

CNDTE: APPAR

SHEET 6 OF 7 PREPARED BY: R-SQUARED GLOBAL, LLC 1309 LOUISVILLE AVENUE, MONROE, LA 71201 318-323-6900 OFFICE JOB No. R4012_003

REV 3 01/20/2020 JMT





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January 6, 2020

I hereby certify that I, or someone authorized within the Caza Operating LLC has provided a

Surface Use Plan of Operations to the surface owner for the subject well pad.

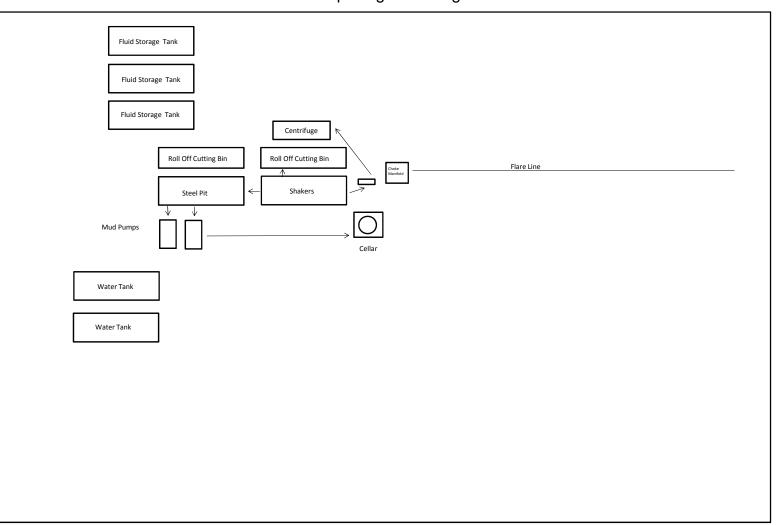
Steve Morris

Contract Engineer, Caza Operating LLC 200 N Lorraine St. #1550 Midland, TX 79701

Closed Loop Diagram Design Plan

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Design Plan, Operating Plan and Maintenance Plan, and Closure Plan for the OCD form C-144

Design Plan:

Fluid and cuttings coming from drilling operations will pass over the shale shaker with the cuttings going to the haul off bin and the cleaned fluid returning to the working steel pits.

Equipment Includes:

1-670bbl steel working pit
2-100bbl steel working suction pits
2-500bbl steel tanks
2-20yd³ steel haul off bins
2-pumps (HHF-1600)
2-Shale shakers
1-Centrifuge
1-Desilter/Desander

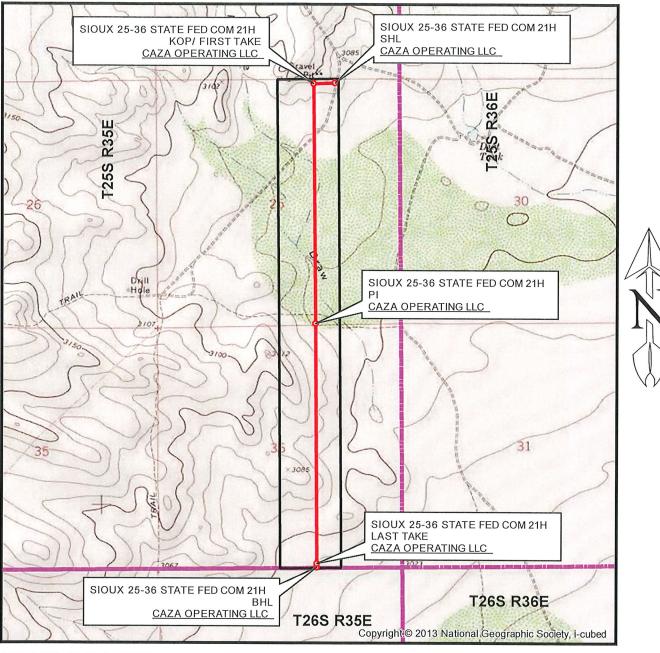
Operating and Maintenance Plan:

Inspection to occur every tour for proper operation of system and individual components. If any problems are found they will be repaired and/or corrected immediately.

Closure Plan:

All haul off bins containing cuttings will be removed from location and hauled to R-360 (NM-01-0006) disposal site located 30 miles east of Carlsbad.

LOCATION VERIFICATION MAP



SEC. 25 TWP. 25-S RGE. 35-E SURVEY: N.M.P.M. COUNTY: LEA OPERATOR: CAZA OPERATING LLC DESCRIPTION: 93' FNL & 1389' FEL ELEVATION: 3090' LEASE: SIOUX 25-36 STATE FED COM U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, NM,TX.

1 " = 2,000 ' CONTOUR INTERVAL = 10'



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PREPARED BY: R-SQUARED GLOBAL, LLC 1309 LOUISVILLE AVENUE, MONROE, LA 71201 318-323-6900 OFFICE JOB No. R4012_003_H District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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: 5/19/2021

Original

Operator & OGRID No.: 249099

□ 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.

W	Vell Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Siou	ux 25-36 State Fed Com 21H		B-25-25S-35E	93'FNL 1389'FEL	1000	flared	

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 to <u>Verdsado</u> and will be connected to <u>Versado</u> low/high pressure gathering system located in Lea County, New Mexico. It will require 1000' of pipeline to connect the facility to low/high pressure gathering system. <u>Caza</u> provides (periodically) to <u>Versado</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Caza</u> and <u>Versado</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Versado</u> Processing Plant located in Sec.29, Twn.21S, Rng.37E, Lea 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>Versado</u> system at that time. Based on current information, it is <u>Caza's</u> belief the system can take this gas upon completion of the well(s).

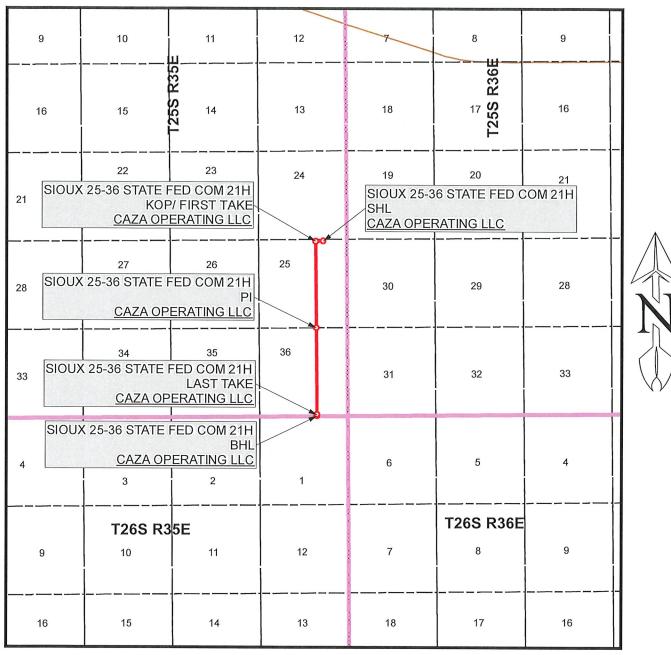
Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

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
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

VICINITY MAP



SEC. 25 TWP. 25-S RGE. 35-E SURVEY: N.M.P.M. COUNTY: LEA OPERATOR: CAZA OPERATING LLC DESCRIPTION: 93' FNL & 1389' FEL ELEVATION: 3090' LEASE: SIOUX 25-36 STATE FED COM U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, NM,TX.

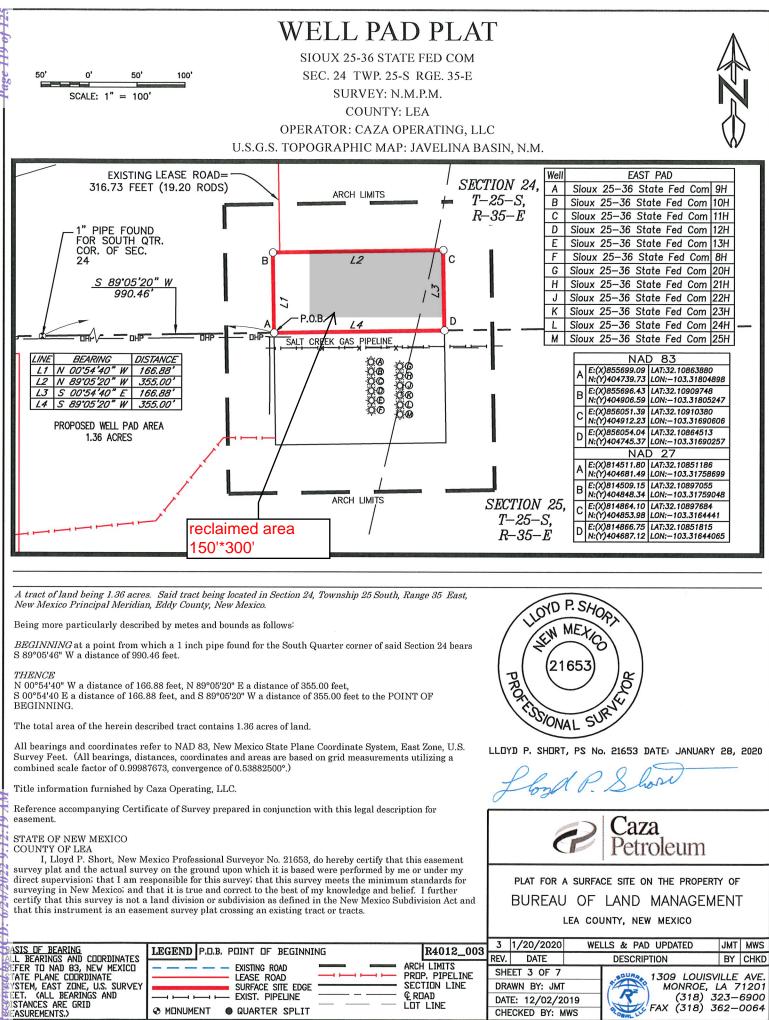
1 " = 1 MILE

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PREPARED BY: R-SQUARED GLOBAL, LLC 1309 LOUISVILLE AVENUE, MONROE, LA 71201 318-323-6900 OFFICE JOB No. R4012_003_H

Page 118 of 125



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WAFMSS

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

APD ID: 10400066301

Operator Name: CAZA OPERATING LLC Well Name: SIOUX 25-36 STATE FED COM

Well Type: OIL WELL

Submission Date: 05/19/2021

Page 120 of 125

09/21/2021

PWD Data Report

Well Number: 21H Well Work Type: Drill

Section 1 - General

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

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? 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 specifications: Pit liner description: Pit liner manufacturers information: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule attachment: Lined pit reclamation description: Lined pit reclamation attachment: Leak detection system description: Leak detection system attachment:

PWD disturbance (acres):

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Lined pit Monitor description: Lined pit Monitor attachment: Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? 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 specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

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

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Would you like to utilize Injection PWD options? N					
PWD disturbance (acres):					
Injection well name:					
Injection well API number:					

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location: **PWD surface owner: PWD disturbance (acres):** Surface discharge PWD discharge volume (bbl/day): Surface Discharge NPDES Permit? Surface Discharge NPDES Permit attachment: Surface Discharge site facilities information: Surface discharge site facilities map: **Section 6 - Other**

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

Other PWD discharge volume (bbl/day):

PWD disturbance (acres):

Received by OCD: 6/24/2022 9:12:19 AM

Operator Name: CAZA OPERATING LLC

Well Name: SIOUX 25-36 STATE FED COM

Well Number: 21H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

WAFMSS

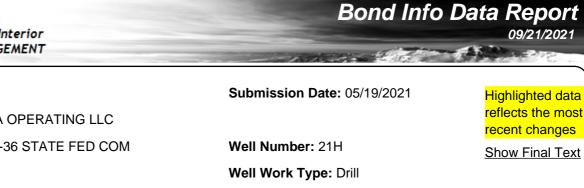
U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

APD ID: 10400066301

Operator Name: CAZA OPERATING LLC Well Name: SIOUX 25-36 STATE FED COM Well Type: OIL WELL

Bond Information

Federal/Indian APD: FED BLM Bond number: NMB000471 BIA Bond number: Do you have a reclamation bond? NO Is the reclamation bond a rider under the BLM bond? Is the reclamation bond BLM or Forest Service? BLM reclamation bond number: Forest Service reclamation bond number: Forest Service reclamation bond attachment: Reclamation bond number: Reclamation bond amount: Reclamation bond rider amount: Additional reclamation bond information attachment:





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:
CAZA OPERATING, LLC	249099
200 N Loraine St	Action Number:
Midland, TX 79701	120245
	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	7/28/2022
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	7/28/2022
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	7/28/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	7/28/2022

Page 125 of 125 CONDITIONS

Action 120245