Mail: david_stew	NTERIOR GEMENT <b>RTS ON WE</b> drill or to re- D) for such p tructions on p DAVID STEW vart@oxy.com	enter an roposals. page 2		OMB Expires 5. Lease Serial No. NMNM81586	e or Tribe Na	137 2018		
AND REPOI proposals to m 3160-3 (API E - Other inst Contact: Mail: david_stew	RTS ON WE drill or to re- D) for such p tructions on p DAVID STEW vart@oxy.com	enter an roposals. page 2		NMNM81586 6. If Indian, Allotte	e or Tribe Na	me		
proposals to m 3160-3 (API E - Other inst Contact: Mail: david_stew	drill or to re- D) for such p tructions on p DAVID STEW vart@oxy.com	enter an roposals. page 2		·		me		
Contact: Mail: david_stew	DAVID STEW vart@oxy.com			7. If Unit or CA/Ag		6. If Indian, Allottee or Tribe Name		
Mail: david_stew	vart@oxy.com	/ART			greement, Na	ne and/or No.		
Mail: david_stew	vart@oxy.com	/ART		8. Well Name and No. CEDAR CANYON 23 FEDERAL COM 6H				
	3h Phone No.			9. API Well No. 30-015-44095-00-X1				
		3b. Phone No. (include area code) Ph: 432.685.5717			10. Field and Pool or Exploratory Area PIERCE CROSSING-BONE SPRING,			
urvey Description,	)			11. County or Paris	sh, State			
Sec 22 T24S R29E NESE 2329FSL 1173FEL 32.202053 N Lat, 103.967552 W Lon				EDDY COUNTY, NM				
TE BOX(ES)	TO INDICA	FE NATURE O	F NOTICE,	REPORT, OR O	THER DA	TA		
TYPE OF ACTION								
cidize 🗖 Deepen		ben	Product	ion (Start/Resume)	🗖 Wa	ter Shut-Off		
Casing	-					ll Integrity		
ng Repair	_	Construction	□ Recomp			Other Change to Original		
ge Plans vert to Injection	Plug	and Abandon Back	-	<ul><li>Temporarily Abandon</li><li>Water Disposal</li></ul>		PD		
If the operation re- lotices must be fil n. roval for the fol	sults in a multipl ed only after all r llowing change	e completion or recorequirements, includes from the appreciation of the second se	ompletion in a ling reclamatio	om 414' 🕬 🕻	3160-4 must ed and the op	be filed once erator has		
					ARTESIA [	DISTRICT		
5		ningo.	0-17	NOCD	MAYU	3 2017		
.ion.		Accepted for	record - 14		RECEI	VED		
For O	XY USA INC.	ent to the Carlsb	bad	-		<del></del>		
100 IOI process								
		<u></u>						
				<u></u>				
S SPACE FC								
Approved By APPARA			CHRISTOPHER WALLS TitlePETROLEUM ENGINEER Date 04/27/20			Date 04/27/201		
of this notice does those rights in the thereon.	s not warrant or e subject lease	Office Carlsba	d					
n 1212, make it a	crime for any pe to any matter wi	rson knowingly and thin its jurisdiction.	willfully to ma	ike to any department	t or agency of	the United		
	ect Emulsion casing for tim tion. Submission # For O ISS for process S SPACE FC	ect Emulsion Water Based I casing for time and cost sat tion. Submission #373650 verifie For OXY USA INC, ISS for processing by DEBO S SPACE FOR FEDERA of this notice does not warrant or those rights in the subject lease thereon. n 1212, make it a crime for any pe	ect Emulsion Water Based Mud in Interme casing for time and cost savings. tion. Submission #373650 verified by the BLM We For OXY USA INC, sent to the Carlsk ISS for processing by DEBORAH MCKINNEY Title SR REC Date 04/21/2 S SPACE FOR FEDERAL OR STATE CHRISTO TitlePETROLE	ect Emulsion Water Based Mud in Intermediate Hole fr casing for time and cost savings. tion. ect. Submission #373650 verified by the BLM Well Information For OXY USA INC, sent to the Carlsbad ISS for processing by DEBORAH MCKINNEY on 04/24/2017 Title SR REGULATORY Date 04/21/2017 SSPACE FOR FEDERAL OR STATE OFFICE US CHRISTOPHER WALL TitlePETROLEUM ENGINE of this notice does not warrant or those rights in the subject lease thereon.	ect Emulsion Water Based Mud in Intermediate Hole from 414' and a casing for time and cost savings. tion. tion. Eect. Submission #373650 verified by the BLM Well Information System For OXY USA INC, sent to the Carlsbad ISS for processing by DEBORAH MCKINNEY on 04/24/2017 (17DLM1478SE) Title SR REGULATORY ADVISOR Date 04/21/2017 S SPACE FOR FEDERAL OR STATE OFFICE USE CHRISTOPHER WALLS Title/PETROLEUM ENGINEER of this notice does not warrant or those rights in the subject lease thereon. 0ffice Carlsbad n 1212, make it a crime for any person knowingly and willfully to make to any department	ect Emulsion Water Based Mud in Intermediate Hole from 414' AAA ONL CON ARTESIA D Casing for time and cost savings. tion.		

¢

## Attachment 3160-5 - OXY USA Inc. Cedar Canyon 23 Fedederal Com 6H – 30-015-44095

OXY USA Inc. respectfully requests approval for the following changes from the approved permit:

- 1. Change in Mud Program
  - Replace MMH with water based Spud Mud in Surface Hole
  - Replace Brine & MMH system with Direct Emulsion Water Based Mud in Intermediate Hole from 414' to ICP.

## Mud Program

Depth	Depth	Fluid Type	Mud Weight	Funnel Visc (sec/qt)	API Fluid Loss
From (ft)	From (ft) To (ft)	Flatu Type	(ppg)		
0	414	Spud Mud	8.4-8.6	40-50	N/C
414	8463	Direct Emulsion WBM	9.0-10.0	28-38	N/C
8463	16336	OBM	9.2-10	28-34	<15

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

As discussed on 04/12/17, Oxy proposes to drill out the surface casing shoe with a Direct Emulsion Water Based Mud which will consist of an external saturated brine phase with pH above 10 at all times, from 414' - ICP. This will eliminate the need for two mud systems, to manage both the salt and losses circulation interval.

## 2. Utilize a spudder rig to pre-set surface casing for time and cost savings.

	Yes/No
Will more than one drilling rig be used for drilling operations? If yes, describe.	Yes
• Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for	
this well. If the timing between rigs is such that Oxy would not be able to preset surface, the	
Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the	
attached document for information on the spudder rig.	

## **Description of Operations**

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.

**a.** After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).

**b.** The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.

2. The wellhead will be installed and tested as soon as the surface casing is cut off and the WOC time has been reached.

3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wingvalves.

**a.** A means for intervention will be maintained while the drilling rig is not over the well.

- 4. Spudder rig operations are expected to take 2-3 days per well on the pad.
- 5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.

**6.** Drilling operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nippled up and tested on the wellhead before drilling operations resume on each well.

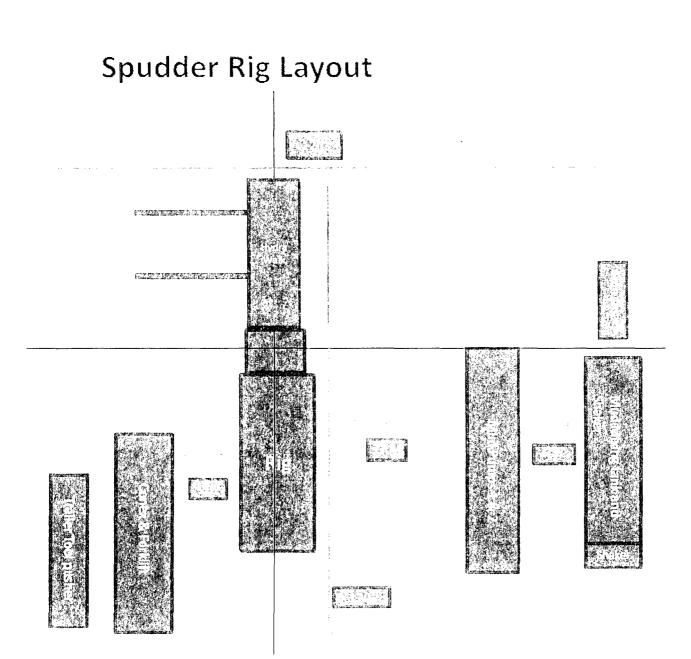
**a.** The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.

**b.** The BLM will be contacted / notified 24 hours before the larger rig moves back on the pre-set locations.

- 7. Oxy will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
- 8. Once the rig is removed, Oxy will secure the wellhead area by placing a guard rail around the cellar area.

٠,

ť



2