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 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

Form C-101 Revised July 18, 2013

□AMENDED REPORT

Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. From Sources APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address Catena Resources Operating, LLC 18402 US Highway 281 N, Suite 258 San Antonio TX 78259 (210) 319-7557 OGRID Number 328127 728 API Number

5632 30-025-

93528 STATE CON

7. Surface Location

UL - Lot	Section 21	Township 19 S	Range 35 E	Lot Idn	Feet from 600	N/S Line S	Feet From 930	E/W Line E	County Lea
8. Proposed Bottom Hole Location									
UL - Lot	Section 33	Township 19 S	Range 35 E	Lot Idn	Feet from 100	N/S Line S	Feet From 990	E/W Line E	County Lea

9. Pool Information

	Pool Name	Pool Code
	Pearl; Bone Spring	49680
	,	

Work Type	12.	Well Type O	13. Cable/Rotary R	14. Lease	е Туре	3776'
^{16.} Multiple N		oposed Depth 78' MD: 21367'	^{18.} Formation Bone Spring	to be det		²⁰ Spud Date upon approval
Depth to Ground water		Distance from nearest fresh water well			Distance to nearest surface water	

20' in L 02250

1292' west of L 02250

≈3200' SE of stock tank

A closed-loop system will be used in lieu of lined pits.

21. Proposed Casing and Cement Program

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17.5"	13.375"	54.5	GL - 1850'	1070 lead + 320 tail	GL
Intermediate	12.25"	9.625"	40.0	GL - 4100'	630 lead + 250 tail	GL
Production	8.75"	5.5"	20.0	GL - 21367'	720 lead + 3080 tail	3600'

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Туре	Working Pressure (psi)	Test Pressure (psi)	Manufacturer
annular and single & double rams	ann: 3000 and rams: 5000	ann: 3000 and rams: 5000	Shaffer

^{23.} I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION			
I further certify that I have complied with 19.15.14.9 (A) NMAO and/or 19.15.14.9 (B) NMAC , if applicable. Signature:	Approved By:			
Printed name: Brian Wood	Title: Petroleum Engineer			
Title: Consultant	Approved Date: 02/22/19 Expiration Date: 02/22/21			
E-mail Address: brian@permitswest.com				
Date: 2-5-19 Phone: 505 466-8120	Conditions of Approval Attached See Attached			

Conditions of Approval