(-,-)	State of New Mexico	Form Eage 103
1625 N. French Dr., Hobbs, NM 88240	rgy, Minerals and Natural Resources	Revised July 18, 2013 WELL API NO.
District II (575) 749 1292	L CONSERVATION DIVISION	33-025-33238
<u>District III</u> – (505) 334-6178	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE ☑ FEE ☐
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> – (505) 476-3460	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM 87505		LG 6337
SUNDRY NOTICES AND		7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOSALS TO DI DIFFERENT RESERVOIR. USE "APPLICATION FOR PROPOSALS.)		JACKSON UNIT
1. Type of Well: Oil Well Gas Well	✓ Other	8. Well Number ₀₀₃
2. Name of Operator TAP ROCK OPERATING, LLC		9. OGRID Number 372043
 Address of Operator 523 PARK POINT DR, SUITE 200, GOL 	DEN, CO 80401	10. Pool name or Wildcat [79335] JOHNSON RANCH; WOLFCAMP (GAS)
4. Well Location Unit Letter N: 660'	feet from the SOUTH line and 198	go' feet from the WEST line
Section 15	Township 24S Range 33E	NMPM County LEA
	ration (Show whether DR, RKB, RT, GR, etc.	
3614'		
PULL OR ALTER CASING MULTIP DOWNHOLE COMMINGLE CLOSED-LOOP SYSTEM CONTROL OTHER: 13. Describe proposed or completed operations.	OTHER: ations. (Clearly state all pertinent details, and RULE 19.15.7.14 NMAC. For Multiple Components of the Component	and give pertinent dates, including estimated date ompletions: Attach wellbore diagram of FCAMP (GAS) for Johnson Unit 003. Tap Rock will
hereby certify that the information above is tr	ue and complete to the best of my knowleds	ge and belief.
SIGNATURE	TITLE Regulatory Analyst E-mail address: jtrlica@taprock.co	DATE 12/29/2021 m PHONE: 720-772-5910
SIGNATURE	TITLE Regulatory Analyst E-mail address: jtrlica@taprock.co	

575-263-6633

Jackson Unit #3

Lea County, NM

Plug and Abandonment Wolfcamp Perfs Jan 1, 2022

Basic Wellbore Construction Data:

Casing Data			
Size O.D.	Weight	Depth	TOC
13-3/8"	48 ppf	748'	Surface
9-5/8"	40 ppf	5,200'	Surface
7''	29 ppf	12,618'	3,500'
Tubing Data			
2-7/8"	6.5 ppf	13,430'	
Open Perforations			
13,309'-	13,466′ -		
13373'	13,758'		

Objective: Plug and abandonment Wolfcamp Perfs.

Safety:

Comply with all NMOCD, BLM, and Operator safety regulations.

All Personnel MUST wear hard hats, steel toed boots, and safety glasses.

No smoking inside rig anchors.

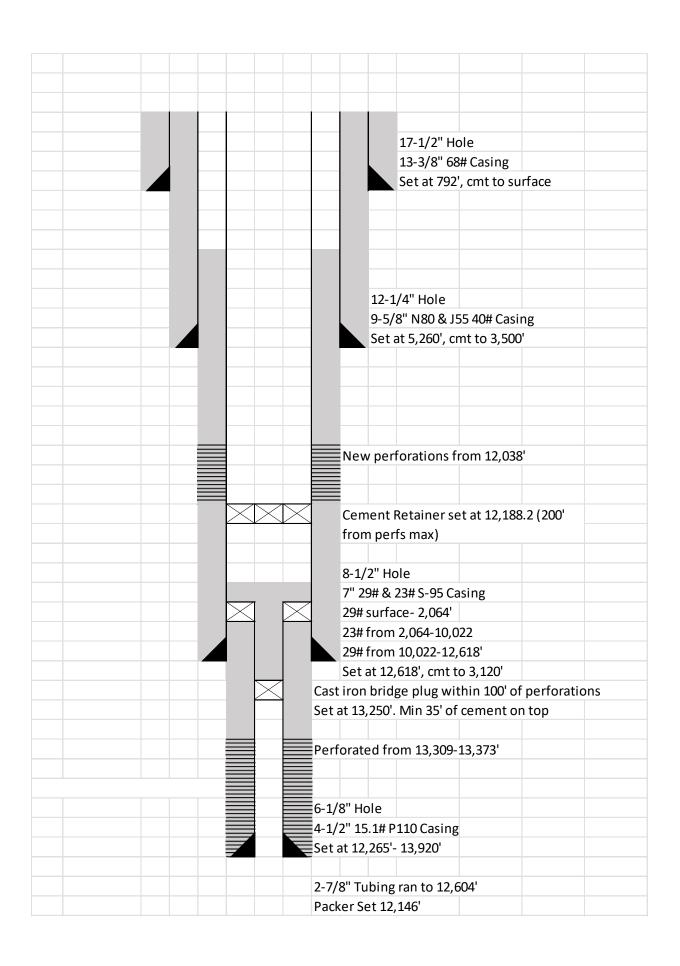
Hold a job safety meeting each morning, and as needed before specific job tasks.

General Considerations and Requirements:

- The procedure will be revised based on approved NMOCD, BLM, and Operator safety regulations.
- All cement volumes use 100% excess outside pipe and 50' excess inside.
- The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures.
- All cement will be class G, mixed at 15.8 ppg with a 1.15 ft³/sacks yield.

Downhole Work Procedure:

- 1. This project will use a steel tank to handle waste fluids circulated from the well and cement wash up.
- 2. Test anchors. If test fails, discuss with company man and plan for rig base beam before proceeding.
- 3. MIRU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing, and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.
- 4. Verify packer at 13,430' is released. If not, proceed as follow;
 - Release packer at 13,430,'. If packer will not release, shoot off tubing above packer. TOOH and LD cut tubing. If packer still in hole, TIH and wash over packer. Retrieve packer and LDT.
 - Once all tubing and packer retrieved from hole, move to next step
- 5. Proceed with plugging operations.
- 6. MIRU cement service company.
- 7. TIH w/pkr and set at 13,300' and squeeze existing perforations at **13,309' 13,758'.**Document number of cement sacks used in this process.
 - **Plug #1.** RIH w/CIBP setting at ~13,228'. Mix and pump 60 sacks of Class G cement on top spotting a balanced plug inside casing to isolate the interval. PUH. WOC. Tag and record final top depth of cement.
- 8. RD aux. equipment, clean loc.





Job: Recomplete 3B Interval

Well: Jackson Unit 3

Est. Start Date: January 1, 2022

Formation: 3rd BS

Engineer: Logan Smith 303-548-8347

2nd Call:

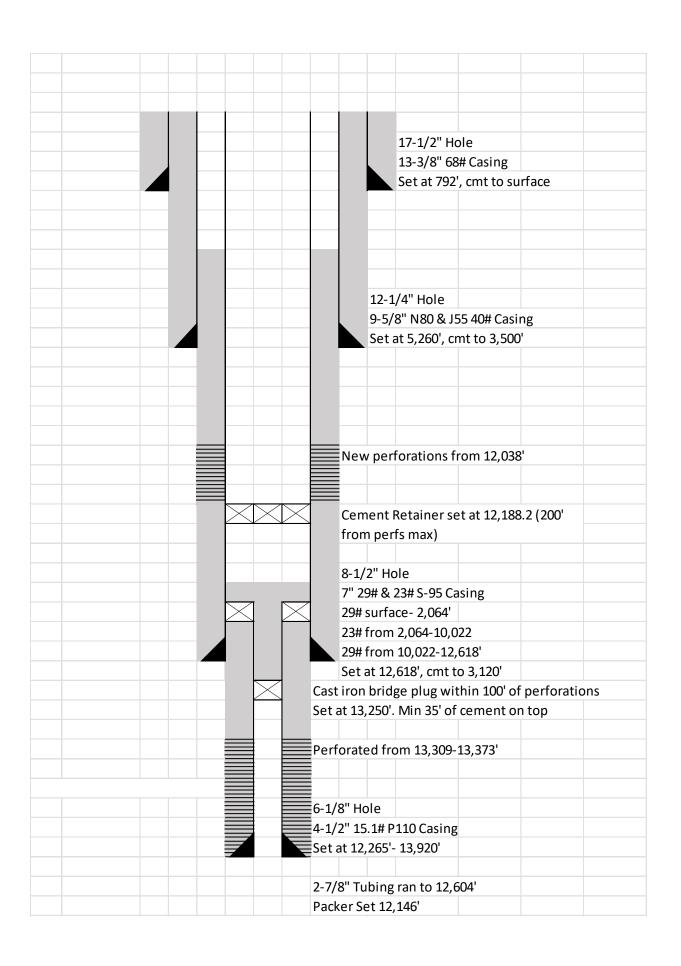
Consultant:

Supervisor:

OBJECTIVE:

Tap Rock Operating would like to add the Third Bone Spring pool to the Jackson Unit 3 perform a DFIT at a depth of approximately 12,000 ft MD.

Jackson Unit 3				
AFE#				
API#		30-025-33	238	
RKB		26.0		
	4.5" 15.10	# P-110 Casing		
ID (in)	3.826			
Drift (in)	3.701			
Bottom	13,920'	Тор	12,265'	
85% Burst (psi)	12,172			
85% Collapse (psi)	12,189			
Capacity (bbls/ft)	0.0142			
Volume to FC (bbls)				
7	7.0" 29# &	23# S-95 Casing		
ID (in) (smallest)	6.094	Depth	12,618′	
Drift (in) (smallest)	6.095	Бериі	12,018	
85% Burst (psi)	6,400			
85% Collapse (psi)	4,800			
Capacity (bbls/ft)	0.036			
		st Intermediate Casing		
85% Burst (psi)	3,350			
85% Collapse (psi)	2,184			
Setting Depth (ft)	5,260'			
Perforating Guns				
Old top perf	13,309	New top perf	12,038	
SPF		Charge Type		
Phasing		EHD / Penetration		



Change Well Head

- 1. Upon AOL, check pressure on all wellhead valves
- 2. Record SICP
 - Well will be dead after P&A

 a)Will be full of 10 ppg brine
- 3. Confirm that well is dead for at least 30 minutes
- 4. Swap production tree with 7 1/16" frac valve for upcoming operations

Set Plug and Run Ultra Sonic Imager

- 5. Notify NMOCD Hobbs office 24 hours before running a full MIT test
 - Kerry Fortner (Compliance Officer)- 575-263-6633
 - Gary Robinson (Compliance Officer)- 575-263-4507
 - Eugene Bolton (Compliance Officer)- 575-840-5961
- 6. Run 6" GR/JB for the 7" casing to roughly 12,250'
 - Record depth of GR/JB run in Wellview
- 7. Make Note of Fluid Level
 - Record fluid level in Wellview

Set Plug and Cement Zone

- 8. Upon AOL, check pressure on all wellhead valves
- 9. Record SICP
- 10. Bleed of pressure to zero
- 11. RU Wireline

Perf Interval

- 12. MIRU wireline unit
- 13. Make up guns
 - Type- 3-1/8" ISGS, S3406D, RDX
 - Confirm the assembly includes gamma and CCL for correlation
 - Should be approximately 12' in size
- 14. Set 7" Bridge Plug top at 12,188'
 - Record depth in Wellview
- 15. Run guns down to target interval of 12,000-12,038' perf
 - Record perf depth in Wellview
- 16. Remove lubricator and secure well

DFIT

- 17. Fill hole to surface with fresh water
 - Record volume to load well to surface in Wellview
- 18. Install surface memory gauge and surface electronic gauge
 - Confirm that both gauges are recording correctly
 - Sage rider memory gauge should be set to 1 or 2 second intervals
 - Record pressure in Wellview
- 19. MIRU pump down truck
- 20. Pressure test all iron and WH equipment to pressures necessary for job. After pressure testing the iron, increase pressure to 1,500 psi and confirm the data trap is recording data appropriately
- 21. Set pop-off and horsepower trips to pressures necessary for job
- 22. Equalize pressure to 2,000 psi or known well pressure and open hydraulic valve
- 23. Begin injecting to perform DFIT
- 24. Start at 2 bpm for 2 minutes until stabilize, then step up to 4 bpm for 2 minutes until stabilize
- 25. Continue stepping up 2 bpm until reach formation break
 - Estimated rate of 6 bpm
- 26. Inject ~50 bbl after formation break at the constant target rate that was used to create formation break (between 5-10 bpm)
 - If a distinct formation break is not seen, but the well seems to be accepting fluid (pressure steadily declining at constant rate of injection) 50 bbl volume more than should suffice
 - Record volume and type of fluid pumped after formation break
- 27. Shut down immediately (do not perform a rate step down). Record pressure drop off in van for 15 minutes. Do not shut in ground valves in order to watch pressure
- 28. Close valves
- 29. RD equipment and horsepower units. Minimize hammering near pressure gauges

CONDITIONS OF APPROVAL FOR PLUGGING AND ABANDONMENT OCD - Southern District

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, Notify NMOCD District Office I (Hobbs) at (575)-263-6633 at least 24 hours before beginning work. After MIRU rig will remain on well until it is plugged to surface. OCD is to be notified before rig down.

Company representative will be on location during plugging procedures.

- **1.** A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs. Insure all bradenheads have been exposed, identified and valves are operational prior to rig up.
- **2.** Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
- **3.** Trucking companies being used to haul oilfield waste fluids to a disposal commercial or private- shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
- 4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
- **5.** A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can +be released.
- **6.** If work has not begun within 1 Year of the approval of this procedure, an extension request must be file stating the reason the well has not been plugged.
- 7. Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.
- **8.** Produced water will not be used during any part of the plugging operation.
- 9. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
- **10.** All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
- 11. Class 'C' cement will be used above 7500 feet.
- 12. Class 'H' cement will be used below 7500 feet.
- **13.** A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged
- **14.** All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing.
- **16.** When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
- 17. A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.
- **18.** A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, (WOC 4 hrs and tag).

- 19. No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.
- 20. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
- A) Fusselman
- B) Devonian
- C) Morrow
- D) Wolfcamp
- E) Bone Springs
- F) Delaware
- G) Any salt sections
- H) Abo
- I) Glorieta
- J) Yates.
- K) Potash---(In the R-111-P Area (Potash Mine Area),

A solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.

21. If cement does not exist behind casing strings at recommended formation depths, the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing.

DRY HOLE MARKER REQ.UIRMENTS

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

- 1. Operator name
- 2. Lease and Well Number
- 3. API Number
- 4. Unit letter
- 5. Quarter Section (feet from the North, South, East or West)
- 6. Section, Township and Range
- 7. Plugging Date
- 8. County

SPECIAL CASES ----AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)

SITE REMEDIATION DUE WITHIN ONE YEAR OF WELL PLUGGING COMPLETION

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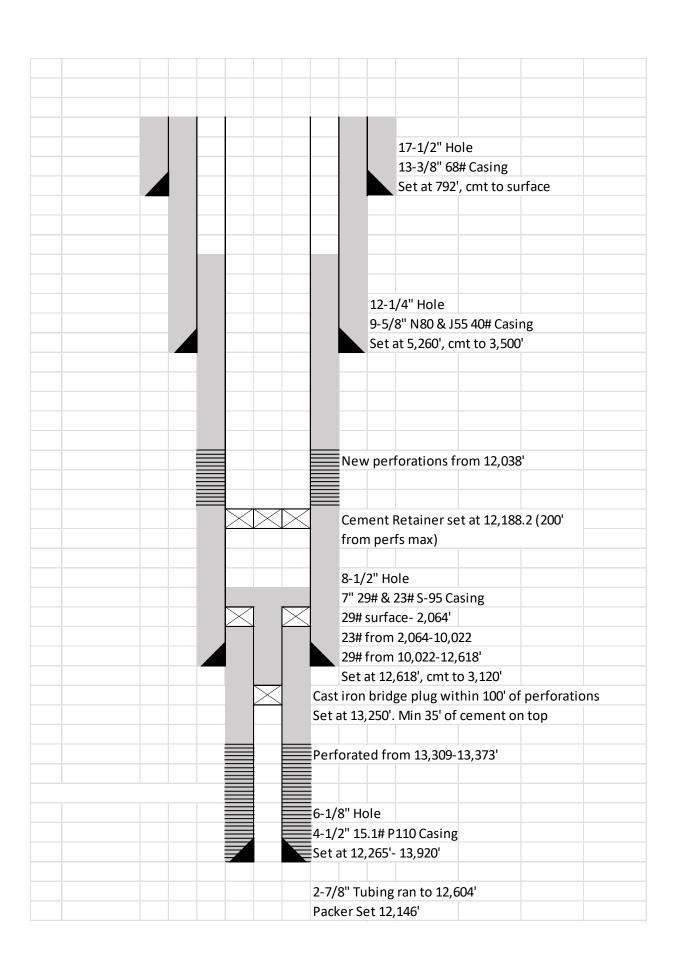
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District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

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

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

Action 69312

CONDITIONS

Operator:	OGRID:
TAP ROCK OPERATING, LLC	372043
523 Park Point Drive	Action Number:
Golden, CO 80401	69312
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kfortner	Run MIT/BHT test	1/11/2022