

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

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401		² OGRID Number 372043
		³ API Number 30-025-33238
⁴ Property Code 008127	⁵ Property Name JACKSON UNIT	⁶ Well No. 3

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	15	24S	333	-	660'	SOUTH	1980'	WEST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name TRIPLE X; BONE SPRING, WEST	Pool Code 96674
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Additional Well Information

¹¹ Work Type RECOMPLETE	¹² Well Type GAS	¹³ Cable/Rotary	¹⁴ Lease Type STATE	¹⁵ Ground Level Elevation 3614'
¹⁶ Multiple N	¹⁷ Proposed Depth 13920	¹⁸ Formation BONE SPRING	¹⁹ Contractor	²⁰ Spud Date 2/9/1996
Depth to Ground water	Distance from nearest fresh water well		Distance to nearest surface water	

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program


Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5"	13.375"	48	792'	1150	0
Int 1	12.25"	9.675"	40	5260'	2000	0
Int 2	8.75"	7"	23	12618'	2290	4750
Prod	6.125"	4.5"	15.1	13920'	200	12300

Casing/Cement Program: Additional Comments

Reference sundry submitted to PA Wolfcamp Formation

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable. Signature: 	OIL CONSERVATION DIVISION	
	Approved By:	
	Title:	
	Approved Date:	Expiration Date:
	Conditions of Approval Attached	
Printed name: Jeff Trlica		
Title: Regulatory Analyst		
E-mail Address: jtrlica@taprk.com		
Date: 12/29/2021	Phone: 720-772-5910	

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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
Recomplete

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-33238	² Pool Code 96674	³ Pool Name TRIPLE X; BONESPRING, WEST
⁴ Property Code 008127	⁵ Property Name JACKSON UNIT	⁶ Well Number 3
⁷ OGRID No. 372043	⁸ Operator Name TAP ROCK OPERATING, LLC	⁹ Elevation 3614'


¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	15	24S	33E	-	660'	SOUTH	1980'	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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.

¹⁶					¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  12/22/2021 Signature Date Bill Ramsey Printed Name bramsey@taprk.com E-mail Address
					¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

1980'

660'

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: _____ Tap Rock Operating LLC _____ **OGRID:** _____ 372043 _____ **Date:** _____ 08/06/2021 _____

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water
Jackson Unit #3		Sec 15, T24S R 33E	660 FSL, 1980 FWL	60	150	180

IV. Central Delivery Point Name: _____ Jackson 3 CDP _____ [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Jackson Unit #3		N/A	N/A	3/1/2022	1/15/22	1/20/23

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

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

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

Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

XI. Map. ☐ 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 ☐ will ☐ 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 ☐ does ☐ 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: ☐ 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:

☒ 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

☐ 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. ☐ 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. ☐ 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: Jeffrey Trlica
Title: Regulatory Analyst
E-mail Address: jtrlica@taprk.com
Date: 12/29/21
Phone: 720-772-5910
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

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

Each surface facility design includes the following process equipment: 3-phase separators (1 separator per well), a sales gas scrubber, one or two 3-phase heater treaters, a vapor recovery tower (VRT), a VRU compressor, multiple water and oil tanks, as well as flare knockouts (HP & LP), and flares (HP & LP). All process vessels will be sized to separate oil, water, gas based upon typical/historical & predicted well performance. Each process vessel will be fitted with an appropriately sized PSV as per ASME code requirements to mitigate vessel rupture and loss of containment. Additionally, the process vessels will be fitted with pressure transmitters tied to the facility control system which will allow operations to monitor pressures and when necessary, shut-in the facility to avoid vessel over-pressure and the potential vent of natural gas. Natural gas will preferentially be sold to pipeline, and only during upset/emergency conditions will gas be directed to the HP flare system. Flash gas from both the 3-phase heater treater and the VRT will be recompressed using a VRU compressor and this gas will also preferentially be directed to the gas sales pipeline. Oil tanks & water tanks will be fitted with 16 oz thief hatches as well as PVRVs to protect the tanks from rupture/collapse. Additionally, the tank vapor outlets and tank vapor capture system will be sized to keep tank pressures below 12 oz. The tank vapor capture system will include a tank vapor blower & knockout as well as a low-pressure flare and knockout. Tank vapors will preferentially be directed to the VRU and the sales gas pipeline. Only during process upsets/emergency conditions will tank vapors be directed to the LP flare system.

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

- During drilling operations- Gas meters will be installed at the shakers and Volume Totalizers will be installed on the pits. In the event that elevated gas levels, or a pit gain are observed, returns will be diverted to a gas buster. Gas coming off the gas buster will be combusted at the flare stack. A 10' or taller flare will be located at least 100' from the SHL.
- During completions operations, including stimulation and frac plug drill out operations, hydrocarbon production to surface is minimized. When gas production does occur, gas will be combusted at a flare stack. A 10' or taller flare will be located at least 100' from the SHL.
- During production operations, all process vessels (separators, heater treaters, VRTs, Tanks) will recompress (where necessary) and route gas outlets into the natural gas gathering pipeline. Gas will preferentially be routed to natural gas gathering pipeline and the flare system will be used only during emergency, malfunction, or if the gas does not meet pipeline specifications. In the event of flaring off-specification gas, operations will pull gas samples twice a week and will also route gas back to pipeline as soon as the gas meets specification. Exceptions to this will include only those qualified exceptions per the regulation 19.15.27.8 Subsection D.

- To comply with state performance standards, separation and storage equipment will be designed to handle the maximum anticipated throughput and pressure to minimize waste and reduce the likelihood of venting gas to atmosphere. Additionally, each storage atmospheric tank (Oil & Water) will be fitted with a level transmitter to facilitate gauging of the tank without opening of the thief hatch. Any gas collected through the tank vent system is expected to be recompressed and routed to sales. However, in the event of an emergency, the tank vapor capture system will be designed to combust the gas using a flare stack fitted with a continuous or automatic ignitor. The flare stack will be properly anchored and will be located a minimum of 100 feet from the well and storage tanks. Operators will conduct weekly AVO inspections. These AVO inspection records will be stored for the required 5-year period and will be made available upon Division request.

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

- When performing routine or preventive maintenance on a vessel or tank, initially all inlet valves are closed, and the vessel or tank is allowed to depressurize through the normal outlet connections to gas sales and/or liquid tanks. Once the vessel or tank is depressurized to lowest acceptable sales outlet pressure, usually around 20 psig, a temporary low-pressure flowline is connected from the vessel or tank to the Vapor Recovery Unit (VRU) for further pressure reduction. Once depressurized to less than 1-2 psig, the remaining natural gas in the vessel or tank is vented to atmosphere through a controlled pressure relief valve. Once the vessel or tank is depressurized to atmospheric pressure, the vessel or tank can be safely opened, and maintenance performed.

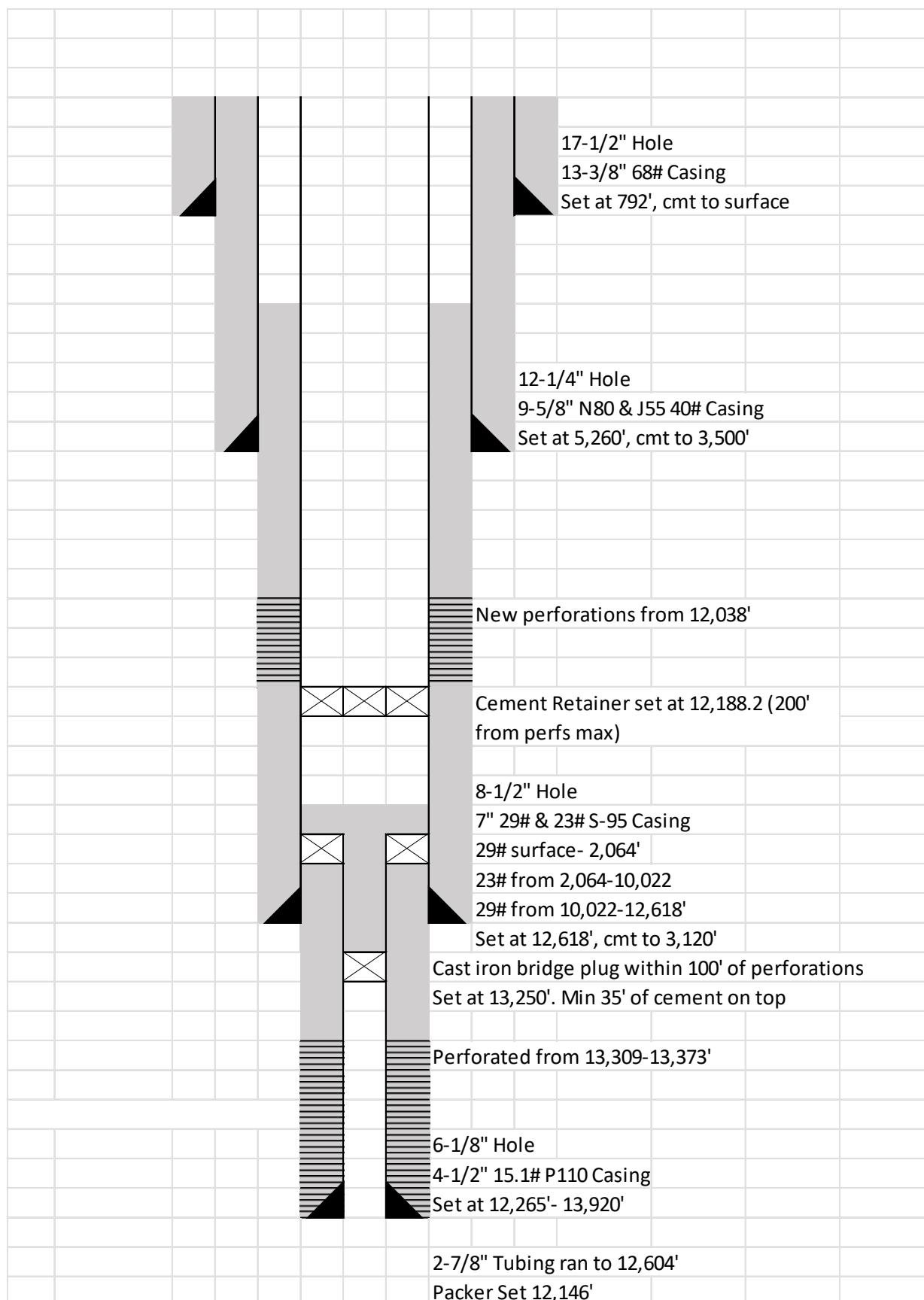


Job: Recomplete 3B Interval
Well: Jackson Unit 3
Est. Start Date: January 1, 2022
Formation: 3rd BS
Engineer: Logan Smith 303-548-8347
2nd Call:
Consultant:
Supervisor:

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#		30-025-33238	
RKB		26.0	
4.5" 15.10# P-110 Casing			
ID (in)	3.826		
Drift (in)	3.701		
Bottom	13,920'	Top	12,265'
85% Burst (psi)	12,172		
85% Collapse (psi)	12,189		
Capacity (bbls/ft)	0.0142		
Volume to FC (bbls)			
7.0" 29# & 23# S-95 Casing			
ID (in) (smallest)	6.094	Depth	12,618'
Drift (in) (smallest)	6.095		
85% Burst (psi)	6,400		
85% Collapse (psi)	4,800		
Capacity (bbls/ft)	0.036		
9 5/8" 47# N-80 1st 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 NMOCB 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

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' - 13373'	13,466' - 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:

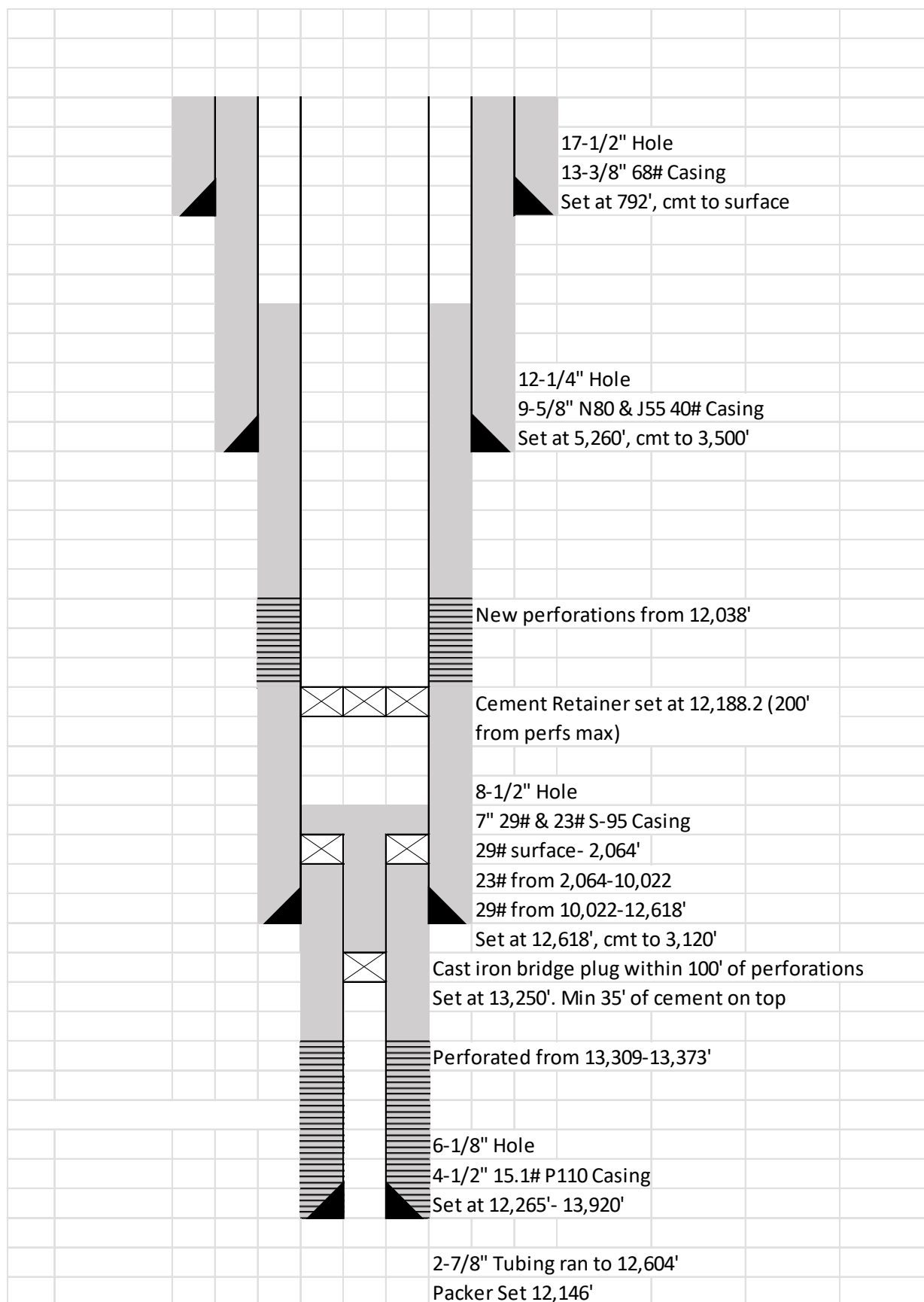
- The procedure will be revised based on approved NMOCD, BLM, and Operator safety regulations.
- All cement volumes use 100% excess outside pipe and 50' excess inside.
- The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures.
- All cement will be class G, 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. TOO H 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.



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CONDITIONS

Action 69317

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 69317
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	12/30/2021