

Submit a Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-43422	
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name Quail 16 State SWD	
8. Well Number 009	
9. OGRID Number 332947	
10. Pool name or Wildcat SWD; DEVONIAN 96101	
4. Well Location Unit Letter N : 1050 feet from the South line and 2230 feet from the West line Section 16 Township 20S Range 34E NMPM County Lea	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3637 GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>	Tubing upsize <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Avant Operating II, LLC would like to request a tubing upsize, please see attached checklist, current/proposed wellbore diagrams and additional attachments for this work.

Spud Date:

10/15/2016

Rig Release Date:

1/9/2017

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE **Contract Regulatory Analyst** DATE **1/8/2026**

Type or print name **Meghan Twele** E-mail address: **mtwele@outlook.com** PHONE: **720-339-6880**

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

Proponent Checklist for Tubing Upsize request

Please submit the following details to demonstrate the feasibility of fishing parted tubing. The checklist and requested documentation must be attached to a C-103X (NOI General Sundry) for tubing upsize.

If additional space is required to answer the questions below, please attach a separate sheet and reference the item number with the applicable answer.

Item	Wellbore Details (Current and Proposed)	
1	Provide detailed wellbore diagrams showing casing size, casing weight, casing grade, tubing details, landing nipples, packer details and setting depths for each tubing, casing and liner from surface to Total Depth. The diagrams must include the "Current" and "Proposed" tubing parameters (OD, weight, grade and setting depth(s)) to clearly illustrate pertinent details associated with the tubing upsize request. Applicant must also include an analysis of the anticipated reduction in tubing friction pressure that will result from installation of the larger diameter tubing.	See WBS attachment
1.1	What is the minimum Inside Diameter (ID) of the production casing in inches	6.184"
1.2	What is the minimum Inside Diameter (ID) of the liner (if applicable) in inches	n/a
1.3	What is the Outside Diameter (OD) of the proposed tubing in inches	5.00"
1.3.1	What is the minimum tensile strength of the tubing in pounds	580,000
1.4	What is the Outside Diameter (OD) of the proposed tubing couplings in inches	5.50"
1.4.1	What is the minimum tensile strength of the tubing coupling in pounds	464,000
1.5	Provide details on the proposed packer and the running procedure, setting sequence, release sequence	See attachment
1.5.1	Is the packer set via wireline or on pipe?	Wireline
1.5.2	Does the packer incorporate a Polished Bore Receptacle (PBR) with tubing seal assembly stung-in to the PBR?	
1.5.3	Does the tubing/packer assembly incorporate an on/off tool? If yes, can the latch / release procedure be performed if the tubing is latched with and overshot or a spear after a tubing parting/ failure event?	Yes
1.6	Provide a copy of the deviation survey for the well.	See attached
1.6.1	What is the maximum deviation angle in the wellbore? At what depth?	

1.6.2	What is the maximum Dogleg Severity in the wellbore? At what depth?	
Item	Clearance Parameters between Casing (or Liner) and Tubing Body	
2	Does sufficient clearance exist between the Tubing OD and the applicable <u>minimum</u> ID of the Casing or Liner to latch the tubing body with an overshot? If yes, provide overshot details below.	yes
2.1	Overshot manufacturer	Innovex
2.1.1	Overshot OD	5-7/8"
2.1.2	Grapple type: Basket, Spiral, other	See attached
2.1.3	Maximum catch size for basket grapple and spiral grapple (inches)	See attached
2.1.4	For variable (ie. tapered barrel) overshot, provide the minimum and maximum catch size, if applicable	N/A
2.1.5	What is the minimum tensile strength of the overshot(s) in units of pounds?	323,500
2.1.6	In the event of stuck tubing, can washpipe be used to clean the annular space between the tubing and casing? If yes, provide washpipe specifications (OD, ID, tensile ratings)	See attached
2.1.6.1	Can a latch mechanism (T-Dog Overshot or similar) be run with the washpipe to latch and recover the tubing and collars? Provide details as applicable (OD, ID, Tensile ratings) and an overview of the assembly setup and running procedures.	no
2.1.6.2	Can washpipe be used to wash-over multiple joints of tubing/collars, and subsequently run a cutter on wireline to cut and retrieve the pipe that has been washed over? Provide specifications for washpipe and cutting tools as applicable. Can it be used in conjunction with a T-dog overshot or similar?	See attached
2.1.6.3	Can an external cutter be run on the bottom of the washpipe to cut and recover the tubing? Provide tool specifications (OD, ID, tensile limits) and a brief overview of the procedure.	no
Item	Clearance Parameters between Casing and Tubing Couplings	
3	Does sufficient clearance exist between the Tubing OD and the applicable <u>minimum</u> ID of the Casing or liner to latch the tubing couplings with an overshot? If yes, provide overshot detail below.	no
3.1	Overshot manufacturer	
3.1.1	Overshot OD	
3.1.2	Grapple type: Basket, Spiral, other	
3.1.3	Maximum catch size for basket grapple and spiral grapple (inches)	
3.1.4	For variable (ie. tapered barrel) overshot, provide the minimum and maximum catch size, if applicable	
3.1.5	What is the minimum tensile strength of each overshot in units of pounds?	

3.1.6	In the event of stuck tubing, can washpipe be used to clean the annular space between the tubing collars and casing/liner ? If yes, provide washpipe specifications (OD, ID, tensile ratings)	no
3.1.6.1	Can a latch mechanism (T-Dog Overshot or similar) be run with the washpipe to latch and recover the tubing and collars? Provide details as applicable (OD, ID, Tensile ratings) and an overview of the assembly setup and running procedures.	no
3.1.6.2	Can washpipe be used to wash-over multiple joints of tubing/collars, and subsequently run a cutter on wireline to cut and retrieve the pipe that has been washed over? Provide specifications for washpipe and cutting tools as applicable. Can it be used in conjunction with a T-dog overshot or similar?	no
3.1.6.3	Can an external cutter be run on the bottom of the washpipe to cut and recover the tubing? Provide tool specifications (OD, ID, tensile limits) and a brief overview of the procedure.	no
Item	Internal Spear fishing options	
4	As an alternative to fishing with overshot(s) the proponent is requested to provide details on the option to fish parted tubing using an internal spear. Please provide details on the following:	
4.1	Spear manufacturer	Innovex
4.2	Provide details on the procedure for removal of the internal coating (ie. plastic coating or equivalent) from the tubing ID prior to latching with a spear	See attached
4.3	Spear parameters OD / ID required to latch and recover tubing after internal coating material is removed	See attached
4.4	Provide a general outline / procedure for latching and recovering the tubing using an internal spear.	See attached
4.4.1	Tensile limit of the spear in units of pounds	727,400
4.4.2	Procedure for unseating / releasing from the packer	See attached
4.5	Contingency procedure for recovering the tubing if the tubing cannot be released from the packer and/or if the packer does not unseat	See attached
4.5.1	Does the spear ID allow for the use of mechanical or chemical cutters? (ie. pipe or wireline conveyed)?	See attached
4.5.2	If yes, clarify whether cutters are wireline conveyed, pipe conveyed or if both conveyance options exist.	Wireline

Item	Contingency Procedures	
5	Proponent must provide a narrative on the ability to convey diagnostic (ie. free-point) and cutting tools through the overshot and/or spear fishing assembly for the following scenarios	
5.1	Tubing is latched with overshot, but tubing is stuck below the top-of- fish (eg stuck pipe, fill, cannot release from packer etc). What options are available in this scenario for free point diagnostics and tubing retrieval?	See attached
5.1.1	What is the OD of the free-point tool and applicable cutting tools? Can it be run through the work-string, the overshot, and below the top of fish?	See attached
5.1.2	Are there any constraints associated with well deviation or dogleg severity? Can wireline tools be conveyed by gravity? If not, is pump-down or wireline tractor-conveyance of the tools feasible?	See attached
5.2	Tubing is latched with a spear, but tubing is stuck below the top-of fish (eg stuck pipe, fill, cannot release from packer etc). What options are available in this scenario for diagnostics and tubing retrieval?	See attached
5.2.1	What is the OD of the free-point tool and applicable cutting tools? Can it be run through the work-string, the fishing spear, and below the top of fish?	See attached
5.2.2	Are there any constraints associated with well deviation or dogleg severity? Can wireline tools be conveyed by gravity? If not is pump-down or wireline tractor-conveyance of the tools feasible?	See attached
Item	Additional Considerations	
6	If applicable, Proponent is encouraged to provide additional details in support of their tubing upsize request to demonstrate how parted tubing can be effectively recovered to facilitate continued operation of the well, and future Plug and Abandonment (P&A) operations in accordance with OCD plugging requirements.	See attached

Checklist request cont.:

1.5 - The setup we have designed at the moment from top to bottom is a 7" 29# Pema Pak with a 6' seal bore extension, seal extension tubing bottom, 6' 17-4 Stainless Steel 3 1/2 sub, followed by a 2.81 XN landing nipple. The Perma Pak spec has a short setting procedure of the tool. As far as running procedure, we will have preassembled on a baker20 high temp setting tool with the proper Wireline adapter made up ready to pick up. So, after rigging up wireline we can provide the option of running a gauge ring & junk basket ahead of the tool if needed. Once gauge ring run is completed (if needed) our tool will be ready for charge and collar locator to be installed by wireline company, picked up with lubricator and ran to depth. Once desired setting depth is correlated and tool is tool is set, we will be running in with the Locator seal assembly with additional seal units and a mule shoe bottom for stinging in and testing.

1.6 & 1.6.1 – Survey data requested from original operator. No survey file given at ownership transfer.

2.1.2 & 2.1.3 – Basket = 4-1/2" , Spiral = 5"

2.1.4 – N/A

2.1.6 – Yes, 6" OD, 5.227 ID, 232,000#

2.1.6.2 – Collars must be milled away, wireline cuts may be used inside

4.2 – IPC is usually catchable with ITCO type spear without prior removal.

4.3 – Spear OD = 4 1/32" , Grapple = 4.228" nominal

4.4 – Lower spear into fish with grapple fixed in "set" position or place into set position with 1-1/2 rounds to the left. Pull up to engage fish.

4.4.2 – Packer has a locator upset in the seal bore that is released by pulling 15,000# over string weight to release tubing from packer seal bore.

4.5 – After well is dead: Run e-line free-point to determine exact stuck point.

Part tubing above stuck point by:

- 1) String shot back-off.
- 2) E-line cutter (jet)
- 3) Mechanical or hydraulic actuated tubing conveyed cutter

After removing cut tubing from above stuck point, run jarring assembly with overshot or spear or wash over/mill up remainder of fish.

4.5.2 – E-line conveyed ‘split shot’ cutters. No pipe conveyed through spear.

5.1 – As overshot can have no ID restriction, anything that can be done with a full tubing string intact can be done through an overshot

5.1.1 – Typical free-point tools are 1-11/16” OD. Various cutting tools up to 4” OD may be used through overshot.

5.2 – Spear does restrict ID, therefore limiting access below spear to less than 2”. Can still e-line back off, split shot, free-point, perforate, etc.

5.2.2 – No constraints with well deviation. Wireline tools can be conveyed by gravity.

6. – Proposed tubing size has the same collar OD of what is currently in the well. During the last tubing string change in 2023 the string had to be fished. A spear was used to fish the 4-1/2” IPC string that was originally installed. The 5” string will allow for lower friction pressure to reduce tension forces in the string that can lead to injection string fatigue/failure.

Current Wellbore:

Well: **Quail 16 State SWD No. 9**Operator: **Fasken Oil and Ranch, Ltd.**Location: **1050' FSL and 2330' FWL**

Sec 16, T20S, R34E

Lea County, NM

Compl.: **1/9/2017 released rig**API #: **30-025-434224**TD: **16,500'**PBDT: **16,500' (open hole TD)**Casing: **13-3/8" 54# J55 & 48# H40 @ 1650' KB**

w/ 945sx "C" (12.8 ppg) + 290 sx "C" (14.8 ppg)

TOC surf, circ 130 bbls cmt

9-5/8" 40# HCK55 @ 5191' KB

1st stg: 362 sx "C" (12.5 ppg) + 250sx "C" (14.8 ppg)

Circ 20 bbls cmt off DV tool

DV- 9-5/8" @ 3846.16'

2nd stg: 1527 sx "C" (12.5 ppg) + 200 sx "C" (14.8 ppg)

TOC surf, circ 205 bbls cmt

7" 26# NT80/NT90, 29# HC-L80 @ 14726'

1st stg: 455 sx Pro-Eco "H" (13.1 ppg) + 150 sx "H" (17.5 ppg)

Circ 30 bbls cmt off DV1

DV1- 7" @ 10,186.72'

2nd stg: 347 sx Pro-Eco "C" (11.8 ppg) + 205 sx "H"

Circ 20 bbls cmt off DV2

DV2- 7" @ 5208.14'

3rd stg: 280 sx Pro-Eco "C" (11.6 ppg) + 152 sx "C" (14.8 ppg)

TOC surf, circ 11 bbls cmt

Hole Sizes: **17-1/2" Surf-1,665'****12-1/4" 1665'-5205'****8-3/4" 5205'-14,733'****6" 14,733'-16,500'****Packer Detail - Set at 14,704'**

1 - 4-7/16" SS WL Entry Guide (New)

0.44

1 - 4-7/16" SS 2.81" "R" Profile Nipple (New)

0.88

1 - 3-11/16" Fiberglass tubing sub w/ 3-1/8" ID (new)

3.48

7" Perma Latch Packer w/ 4" ID

2.91

Total

7.71

Tubing Detail (As Ran)

1 - 3-15/16" SS seal assembly w/ 5" no go collar 3" ID (new)

Top @ FS

3.07 14681.28

1 - 4-7/16" SS "F" profile nipple (new)

0.89

14680.39

1 - 5-1/2" OD SS 4-1/2" EUE x 3-1/2" EUE x-over sub (new)

0.62

14679.77

47 - 4.5" 12.75# L80 ERW EUE 8rd R2 NIKO Smls w/ TIPC IC 85ST tubing (new)

1493.29

13186.48

53 - 4.5" 12.75# L80 EUE 8rd R2 NIKO Smls w/ IPC 1850 (new)

1716.6

11469.88

350 - 4.5" 12.75# ERW EUE 8rd L80 R2 Belleville w/ IC1850AR IPC tubing (new)

11429.11

40.77

1 - 4.5" 12.75# ERW EUE 8rd L80 R1 Tejas w/ IPC 85ST tubing sub (new)

10.07

30.70

1 - 4.5" 12.75# ERW EUE 8rd L80 R2 Belleville w/ IC1850AR IPC tubing (new)

32.7

-2.00

Total

14686.35

KB

23

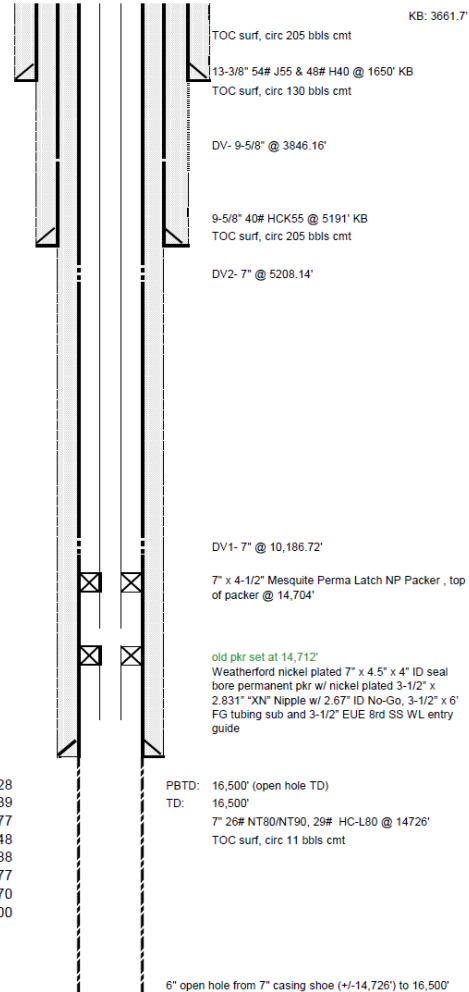
Total

14709.35

8/17/2023

GL: 3636.7'

KB: 3661.7'



Proposed Wellbore:

AFE: LCNM001

API: 30-025-43422

REGULATORY: NM State

PERMIT #

RIG: AWS

KB:

GL: 3637'



Quail 16 State SWD #009

Devonian

Lea County, NM

Sec. 16, T-20S, R-34E; 1050 FSL, 2330 FWL

SHL:

Lat: 32.56877323, Long: -103.5662994 (NAD83)


HOLE SIZE	MD	FORMATION	TVD	MUD	CASING	CEMENT	SPECIAL INSTRUCTIONS
17 1/2 "	120	20" Conductor	120		13 3/8 "		Circ cement to surface is a NMOC requirement
		Rustler			48# H-40 STC 0-1122'		Casing must be set 25' into the Rustler
	1,650	SURF CSG PT	1,650		54.5# J-55 STC 1122' - 1650'		MUD: Fresh water only
12 1/4 "		Solado Yates			9 5/8 "		Circ cement to surface is a NMOC requirement
	3,846	DV TOOL & PACKER	3,846		40# K-55 HC LTC 0 - 4307'		
		Capitan Reef			40# K-55 HC BTC 4307' - 5191'		
		Cherry Canyon					
	5,191	INTRM CSG PT	5,191				
8 1/2 "					PRODUCTION CASING		INJECTION STRING ITEMS:
	5,208	DV TOOL & PACKER	5,208		7 "		5" 18# P-110 HC CT-SWD JNTS
					26# N-80 LTC 0 - 11745'		3-1/2" PIN X 5" CT-SWD BOX X-OVER
	10,186	DV TOOL & PACKER	10,186		29# L-80 HC LTC 11745' - 14726'		3-1/2" X 2.81F SS NIPPLE
					INJECTION STRING		3-1/2" SS SEAL ASSY
					5 "		7" X 4" NP SINGLE BORE PERMA PAK
					18# P-110 HC CT-SWD P700 IPC 0 - 14650'		3-1/2" x 4' FG SUB
	14,650	PRODUCTION PACKER	14,650				3-1/2" x 2.81R SS NIPPLE
	14,726	INTRM CSG PT	14,726				3-1/2" SS W/L ENTRY GUIDE
	16,500	6" OPEN HOLE TD	16,500				
							Est BHST = 230°F, Est BHCT = 213°F
	MD	INC	INC	DIRECTIONAL PLAN			
				TVD			
				ANNOTATION			
DIRECTIONS TO LOCATION:							

PRELIMINARY

Drilling Engineer: Ryan Harris

Quail 16 State SWD #009 (AWS)

Date: 1/7/2026



EZGO™ Connection Data Sheet

Your Requirements

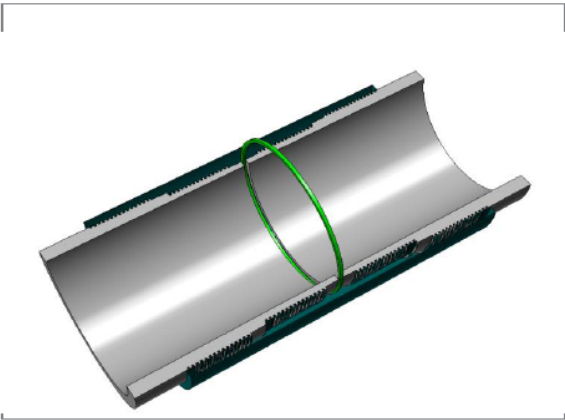
Pipe Size (OD): 5 in Weight: 18 lb/ft Grade: P-110 Connection: EZGO™ CTSWD

Material	
Grade	P-110
Minimum Yield Strength	110,000 psi
Minimum Ultimate Strength	125,000 psi

Pipe Dimensions	
Nominal OD	5 in
Nominal ID	4.276 in
Nominal Wall Thickness	0.362 in
Nominal Weight	18 lbs/ft
Plain End Weight	17.95 lbs/ft
Nominal Pipe Body Area	5.275 sq in

Pipe Body Performance	
Minimum Pipe Body Yield Strength	580,000 lbs
Minimum Collapse Pressure	13,470 psi
Minimum Internal Yield Pressure	13,940 psi
Hydrostatic Test Pressure	12,700 psi

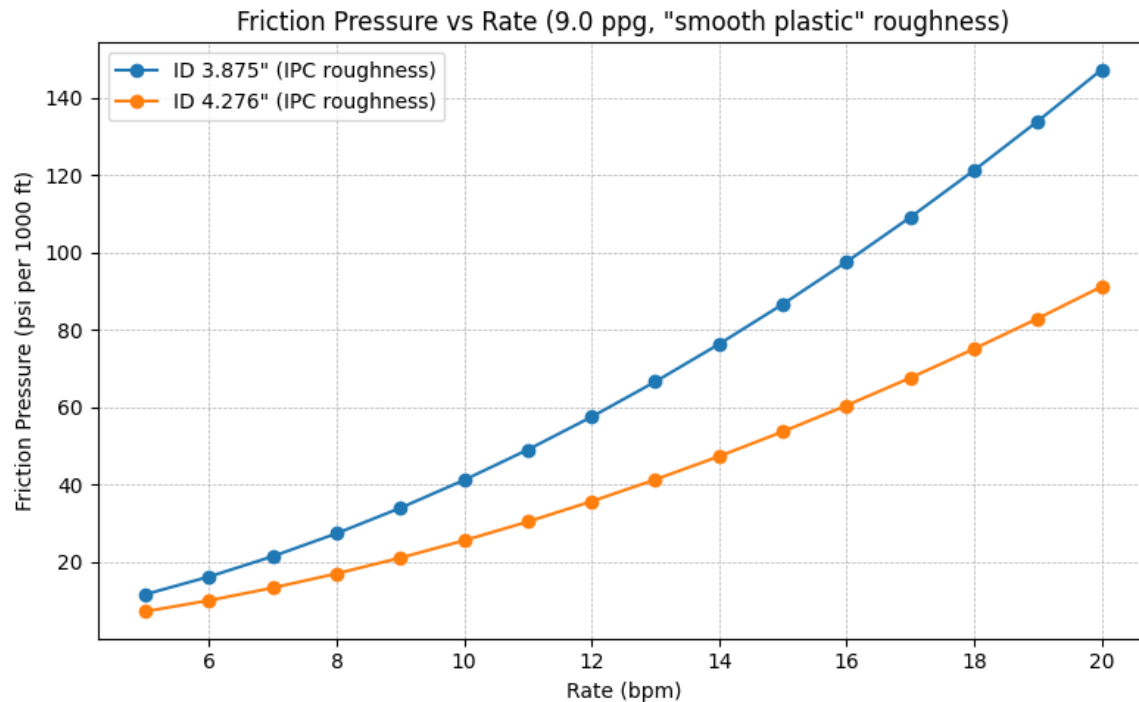
Torque Values	
Minimum Final Torque	4,706 ft-lbs
Maximum Final Torque	8,350 ft-lbs
Operational Max	7,069 ft-lbs



EZGO™ Connection Dimensions	
Connection OD	5.5 in
Connection ID	4.226 in
Connection Drift Diameter	4.151 in
Make-Up Loss	4.24 in
Joint Efficiency	80%

EZGO™ Connection Performance	
Joint Strength	464,000 lbs
Compression Rating	464,000 lbs
Collapse Pressure Rating	13,470 psi
Internal Pressure Resistance	13,937 psi
Maximum Uniaxial Bend Rating	35.9°/100 ft

Friction analysis:



Friction pressures plotted as psi per 1000 ft.

Viscosity assumed at 1.0 cP

Fluid density of 9.0 ppg

Smooth plastic roughness of 0.000005 ft

Darcy-Weisbach with Swamee-Jain friction factor

Friction is reduced ≈ 100 psi at a disposal rate of 15,000bpd (10bpm)

Friction is reduced ≈ 700 psi at a disposal rate of 30,000bpd (20bpm)



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PERMAPAK PACKER - SINGLE BORE

The **Permapak Seal Bore Packer** can be used for single or multiple zone completions. It is designed for wells where high pressure/temperatures and corrosive fluids are present and it is available in a variety of elastomers and seal bore materials to meet a wide range of hostile downhole environments. This packer is recommended for injection stimulation and testing or can become a temporary bridge plug when used with our knock-out or pump-out bottom assembly (refer to Permapak Packer

Tubing and Accessories product sheet). The Permapak Seal Bore Packer comes with a complete line of tubing seal accessories and elastomers.

Special Features

- Electric line, hydraulic or mechanical set
- Components keyed for milling
- Anti-extrusion rings expand to casing ID to prevent rubber extrusion
- Full circle slips allow for faster run time



Product Specifications - Single Bore

Casing		Recommended Hole Size (inches)	Tool OD (inches)	Packer Bore (inches)	Min ID Thru Seals (inches)	Part Number
Size (inches)	Weight (lbs/ft)					
3-1/2	7.7 - 10.2	2.922 - 3.068	2.750	1.750	1.187	67235
4	9.5 - 11.6	3.428 - 3.548	3.281	1.750	1.187	67240
	11.6 - 14.8	3.240 - 3.428	3.090	1.750	1.187	67241
4-1/2	9.5 - 13.5	3.920 - 4.090	3.750	2.500	1.910	67045
				2.688	1.938	67245
	15.1	3.826	3.600	2.500	1.910	67246
5	15.0 - 21.4	4.126 - 4.408	3.968	2.500	1.910	67050
				2.688	1.938	67250
5-1/2	13.0 - 17.0	4.892 - 5.044	4.532	2.688	1.938	67055
				3.000	2.375	67255
	17.0 - 23.0	4.670 - 4.892	4.438	2.688	1.938	67056
				3.000	2.375	67256
	23.0 - 26.0	4.548 - 4.670	4.250	2.688	1.938	67057

NOTE: All pricing includes standard Nitrile trim. Other sizes and connections available upon request.



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Permapak Single Bore Product Specifications (continued)

Casing		Recommended Hole Size (inches)	Tool OD (inches)	Packer Bore (inches)	Min ID Thru Seals (inches)	Part Number
Size (inches)	Weight (lbs/ft)					
6	18.0 - 26.0	5.132 - 5.424	4.875	3.000	2.375	67260
6-5/8	17.0 - 32.0	5.675 - 6.135	5.468	3.250	2.416	67065
7	17.0 - 23.0	6.366 - 6.538	6.000	3.250	2.406	67070
				4.000	3.000	67270
	23.0 - 32.0	6.094 - 6.366	5.813	3.250	2.406	67071
				4.000	3.000	67271
	32.0 - 38.0	5.920 - 6.094	5.625	3.250	2.406	67072
				4.000	3.000	67272
7-5/8	24.0 - 39.0	6.625 - 7.025	6.250	3.250	2.416	67075
				4.000	3.000	67275
8-5/8	24.0 - 32.0	7.921 - 8.097	7.625	4.000	3.000	67085
				5.250	4.250	67286
9-5/8	36.0 - 53.5	8.535 - 8.921	8.125	3.250	2.416	67093
				4.000	3.000	67094
				4.750	3.500	67095
				6.000	4.750	67295
10-3/4	40.5 - 55.5	9.760 - 10.050	9.496	4.000	3.000	67010
			9.300	6.000	4.750	67210
	45.5 - 60.7	9.660 - 9.950	9.300	4.000	3.000	67010-9.3
11-3/4	42.0 - 65.0	10.682 - 11.084	10.430	6.000	4.750	67211
13-3/8	54.5 - 77.0	12.275 - 12.615	12.000	9.000	8.000	67213

NOTE: All pricing includes standard Nitrile trim. Other sizes and connections available upon request.

Permanent Packers



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PERMAPAK ACCESSORIES



Seal Bore Extension

A **Seal Bore Extension** is used in installations where floating seals are required due to tubing contractions. This packer accessory allows for a continuous seal bore and is available in lengths up to twenty feet.



Seal Bore to Mill-Out Coupling

A **Seal Bore to Mill-Out Coupling** is used to connect mill-out extensions to seal bore extensions.



Mill-Out Bottom

A **Mill-Out Bottom** is used to connect a mill-out extension to a packer.



Knock-Out Plug Bottom

When a **Knock-Out Bottom** is run below the packer, the knock-out plug allows a packer to serve as a bridge plug holding pressure from above and below.



Knock-Out Plug

A **Knock-Out Plug** is knocked out when the production string is landed.



Mill-Out Extension

A **Mill-Out Extension** is used in installations where floating seals are required due to tubing contractions. In addition, this packer accessory provides a larger ID between a packer bore and a seal bore extension allowing a packer plucker when a packer is milled out.



Pump-Out Plug



Pump-Out Plug w/ Ball Seat

Pump Out Plug

The Pump-Out Plug is available with a variety of threads allowing installation to the bottom of the tubing string to isolate the tubing from the annulus. To remove the plug, pressure is applied to the tubing and the plug is removed to allow full opening. The pump-out pressure value is easily adjusted in the field by adding or removing shear screws. The Pump-Out Plug is available with ball seat.



Concentric Bottom

A **Concentric Bottom** is used to connect a seal bore extension to a packer.



Concentric Coupling

A **Concentric Coupling** is used to connect seal bore extensions to increase length.



Wireline Re-Entry Bottom

A **Wireline Re-Entry Bottom** is used as the packer bottom when an extension below a packer is not required.



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PERMAPAK ACCESSORIES



Anchor Latch Assembly

The **Anchor Latch Seal Assembly** is used when floating seals are not required. This assembly allows the tubing string to be in tension or compression. Upon set down the anchor latches into the packer and can be removed with eight to ten right-hand turns.



Snap Latch Assembly

The **Snap Latch Seal Assembly** latches into the packer upon set down (like our Anchor Latch Seal Assembly). It can be removed with straight pull of 10,000 to 12,000 lbs. above tubing weight. The Snap Latch Seal Assembly is used where a mechanical indication is required to verify the seal assembly is properly positioned in the packer bore.



Seal Unit

The standard **Seal Unit** is furnished with bonded nitrile rings and a 12-inch make-up length. These units may be ordered in various lengths and with severe service seal rings for high temperature and corrosive environmental conditions.



Locator Seal Assembly

The **Locator Seal Assembly** is used in installations which require floating seals. Once landed, the seal locator prevents downward movement of the tubing while allowing the seal to move with tubing contraction.



Half Mule Shoe Guide

The **Half Mule Shoe Guide** is standard with the Seal Assembly to allow for easy entry into the packer bore.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oecd/contact-us>

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

CONDITIONS

Action 541526

CONDITIONS

Operator: Avant Operating II, LLC 1515 Wynkoop Street Denver, CO 80202	OGRID: 332947
	Action Number: 541526
	Action Type: [C-103] NOI General Sundry (C-103X)

CONDITIONS

Created By	Condition	Condition Date
anthony.harris	Post workover MIT required with OCD witness	1/21/2026
anthony.harris	Submit post-workover C-103 Subsequent report with an updated wellbore diagram to reflect "As-installed parameters" (tubing size(s), packer depth, landing nipples etc.)	1/21/2026
anthony.harris	Submit C-115 each month with volume, operating days and injection pressure data. The highest recorded injection pressure for the reporting period must be reported on the C-115.	1/21/2026