

**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

Form C-101  
Revised July 18, 2013

## Energy Minerals and Natural Resources

## Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

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

<sup>1.</sup> Operator Name and Address SPC RESOURCES, LLC PO BOX 1020 ARTESIA, NM 88211		<sup>2.</sup> OGRID Number 372262
		<sup>3.</sup> API Number 30-015-31001
<sup>4.</sup> Property Code 324967	<sup>5.</sup> Property Name SOUTH AVALON AUA COM	<sup>6.</sup> Well No. #001

<sup>7.</sup> Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	23	21S	26E		660	NORTH	660	WEST	EDDY

<sup>8.</sup> Proposed Bottom Hole Location

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

<sup>9.</sup> Pool Information

Pool Name	Pool Code
AVALON; STRAWN (GAS)	71080

## Additional Well Information

<sup>11.</sup> Work Type <b>P</b>	<sup>12.</sup> Well Type <b>G</b>	<sup>13.</sup> Cable/Rotary	<sup>14.</sup> Lease Type <b>P</b>	<sup>15.</sup> Ground Level Elevation <b>3159</b>
<sup>16.</sup> Multiple <b>N</b>	<sup>17.</sup> Proposed Depth <b>10715</b>	<sup>18.</sup> Formation	<sup>19.</sup> Contractor	<sup>20.</sup> Spud Date <b>7/5/2000</b>
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<sup>21.</sup> Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC

## Casing/Cement Program: Additional Comments

EXISTING CASING PROGRAM IS ON FILE WITH OCD

<sup>22.</sup> Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

<sup>23.</sup> 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 ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature:

Printed name: JOCELYN COMPTON

Title: V.P. OF RESERVOIR ENGINEERING

E-mail Address: JCOMPTON@SANTOPETROLEUM.COM

Date: 3/3/2023

Phone: 713-600-7500

## OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1800 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-31001		Pool Code 71080	Pool Name Avalon ; Strawn (Gas)
Property Code 324967	Property Name SOUTH AVALON "AUA" COM		Well Number 1
OGRID No. 372262	Operator Name SPC Resources, LLC		Elevation 3145.

### Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	23	21-S	26-E		660	NORTH	660	WEST	EDDY

### 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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320	N	C	DHC-2825

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

	<h3>OPERATOR CERTIFICATION</h3> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p>	
	<p>Signature <i>Jocelyn Compton</i></p>	
	<p>Printed Name <i>Jocelyn Compton</i></p>	
	<p>Title <i>VP of Reservoir Engineering</i></p>	
<p>Date <i>11/14/2022</i></p>		<h3>SURVEYOR CERTIFICATION</h3> <p>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.</p>
<p>JANUARY 22, 2000</p>		<p>Date of Survey</p>
<p>Signature</p>		<p>NEW MEXICO 5412 REGISTERED PROFESSIONAL ENGINEER</p>

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:** SPC Resources, LLC **OGRID:** 372262 **Date:** 3 / 3 / 2023

**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 BBL/D
South Avalon AUA Com 1	30-015-31001	D-23-21S-26E	660 N, 660 W	0	100	0

**IV. Central Delivery Point Name:** Existing DCP Meter 724912-00 [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
South Avalon AUA Com 1	30-015-31001	7/5/2000	8/6/2000	9/27/2022	10/1/2022	10/1/2022

**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:	Jocelyn Compton
Title:	VP of Reservoir Engineering
E-mail Address:	jcompton@santopetroleum.com
Date:	3/3/2023
Phone:	713-600-7500

**OIL CONSERVATION DIVISION**  
**(Only applicable when submitted as a standalone form)**

Approved By:
Title:
Approval Date:
Conditions of Approval:



## NATURAL GAS MANAGEMENT PLAN – ATTACHMENT

- VI. Separation equipment was sources for original completion in 2000 and sized to accommodate 1 million standard cubic feet a day of throughput. The equipment has been performing according to the manufacturer's specifications and been subject to monthly AVO inspections since September 2022 with no issues.
- VII. SPC Resources, LLC (SPC) will take the following actions to comply with the regulations listed in NMAC 19.15.27.8:
- A. SPC will maximize the recovery of natural gas by minimizing the waste of natural gas through venting and flaring. SPC ensures that the well is connected to a natural gas gathering system with sufficient capacity to transport natural gas. The well is currently and will remain connected to a pipeline with capacity sufficient to gather 100% of the anticipated natural gas.
  - B. No drilling operations are contemplated in this plugback.
  - C. During the completion of the new interval, any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to the existing permanent separation equipment. Produced natural gas from the separation equipment will be sent to sales through the existing gas sales line. It is not anticipated that gas will not meet pipeline standards due to gas analysis from offset wells completed in the proposed interval. SPC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot.
  - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D (1) through (4). If there is no adequate takeaway for the separator gas, the well will be curtailed until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be measured using a total flow meter and reported appropriately.
  - E. SPC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E (1) through (8). All equipment is designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot.

Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. SPC will conduct AVP inspections as described in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.

- F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. SPC will install equipment to measure the volume of natural gas flared from existing process piping, or a flowline piped from equipment such as high-pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued to SPC after May 25, 2021, that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, SPC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.
- VII. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment the associated producing well will be shut in to eliminate venting.



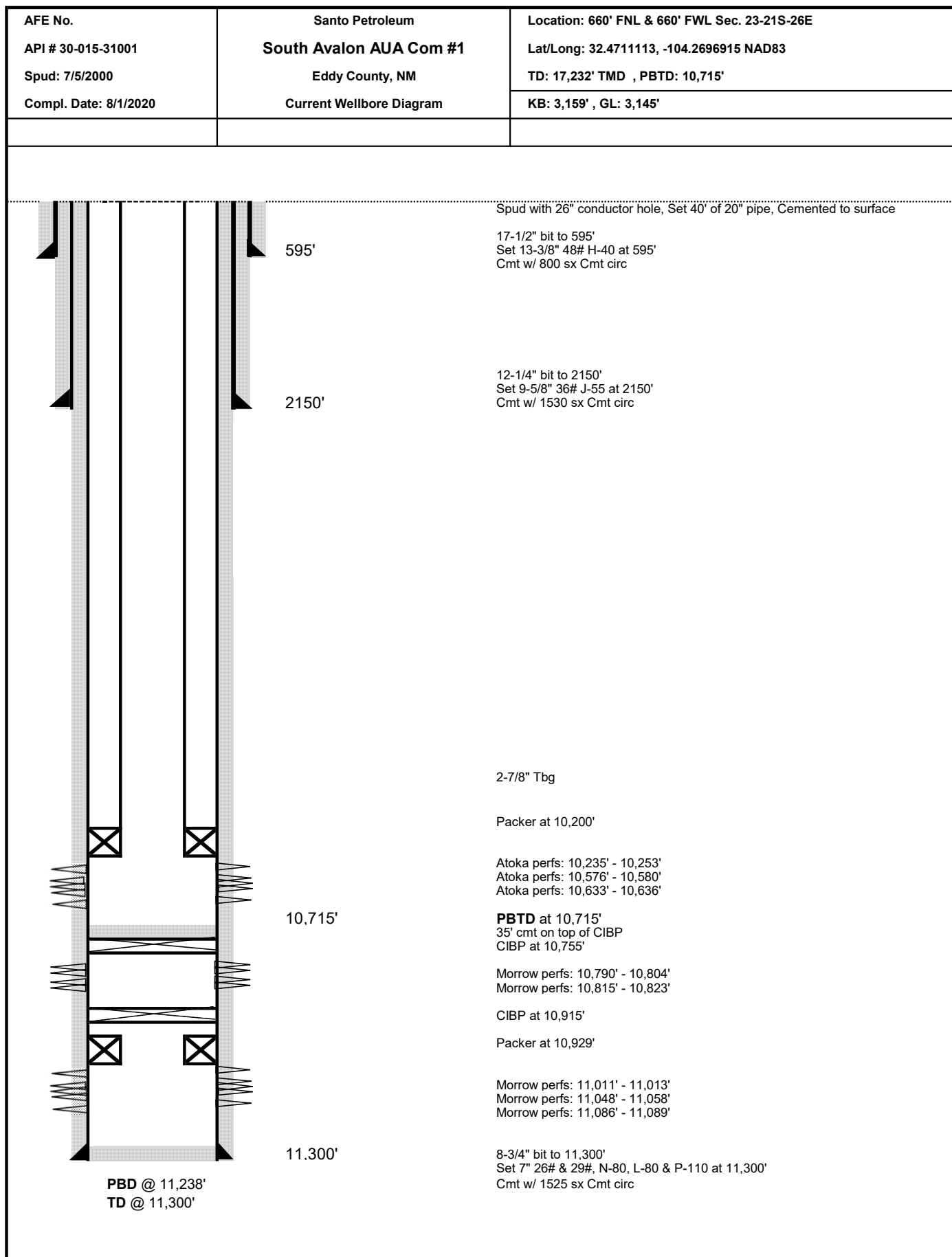
South Avalon AUA Com #001

30-015-31001

## NATURAL GAS MANAGEMENT PLAN – ATTACHMENT

- VI. Separation equipment was sources for original completion in 2000 and sized to accommodate 1 million standard cubic feet a day of throughput. The equipment has been performing according to the manufacturer's specifications and been subject to monthly AVO inspections since September 2022 with no issues.
- VII. SPC Resources, LLC (SPC) will take the following actions to comply with the regulations listed in NMAC 19.15.27.8:
- A. SPC will maximize the recovery of natural gas by minimizing the waste of natural gas through venting and flaring. SPC ensures that the well is connected to a natural gas gathering system with sufficient capacity to transport natural gas. The well is currently and will remain connected to a pipeline with capacity sufficient to gather 100% of the anticipated natural gas.
  - B. No drilling operations are contemplated in this plugback.
  - C. During the completion of the new interval, any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to the existing permanent separation equipment. Produced natural gas from the separation equipment will be sent to sales through the existing gas sales line. It is not anticipated that gas will not meet pipeline standards due to gas analysis from offset wells completed in the proposed interval. SPC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot.
  - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D (1) through (4). If there is no adequate takeaway for the separator gas, the well will be curtailed until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be measured using a total flow meter and reported appropriately.
  - E. SPC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E (1) through (8). All equipment is designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot.

- Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. SPC will conduct AVP inspections as described in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
- F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. SPC will install equipment to measure the volume of natural gas flared from existing process piping, or a flowline piped from equipment such as high-pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued to SPC after May 25, 2021, that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, SPC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.
- VII. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment the associated producing well will be shut in to eliminate venting.

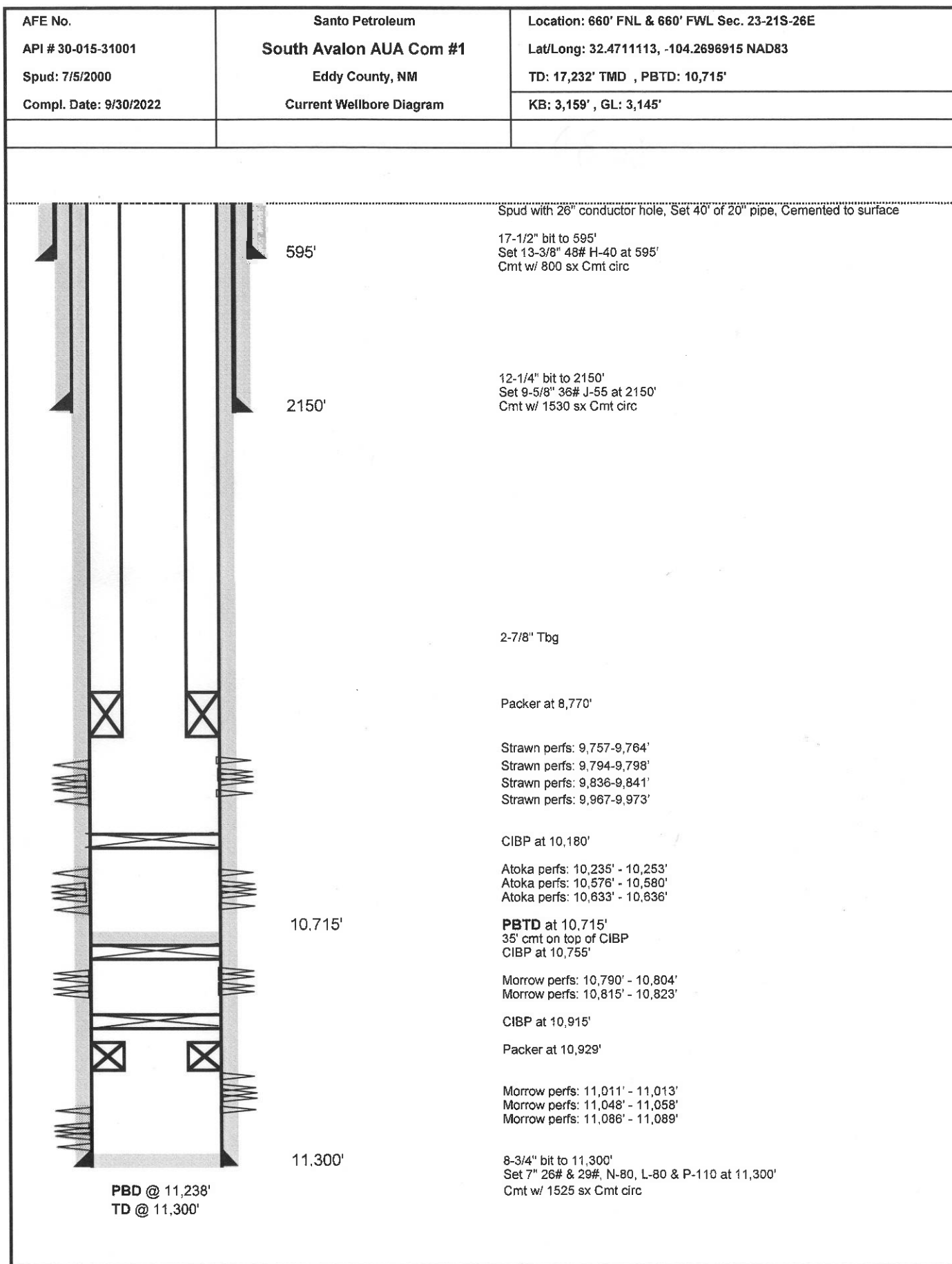


South Avalon AUA Com #001

30-015-31001

## CASING RECORD

CASING SIZE	WEIGHT LB/FT	DEPTH SET	HOLE SIZE	CEMENTING RECORD
20"		40'	26"	Cement to surface
13-3/8"	48#	595'	17-1/2"	800 sxs+ ready mix
9-5/8"	36#	2150'	12-1/4"	1530 sxs, circ
7"	26-29#	11,300'	8-3/4"	1525 sxs



South Avalon AUA Com #001

30-015-31001

#### WORK PLAN

MIRU workover rig

Kill well with 10 ppg water

Release the packer at 10,200', POOH with tubing and packer

Run GR log to correlate depth to proposed Strawn perfs

Run CIBP and set at 10,180' above Strawn perfs

Perforate the Strawn from 9,757'-764', 9,794'-798', 9,836'-841', 9,967'-973' 4spf, 90-deg phase

RIH with Packer

RIH with tubing

Open well to production



South Avalon AUA Com #001

30-015-31001

CLOSED-LOOP SYSTEM

This well is being plugged back, which will not require a drilling rig or a mud system.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

## Northwestern New Mexico

Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
Salt	T. Strawn 9699'	T. Kirtland-Fruitland	T. Penn. "C"
Salt	T. Atoka 9974'	T. Pictured Cliffs	T. Penn. "D"
Yates	T. Miss	T. Cliff House	T. Leadville
7 Rivers	T. Devonian	T. Menefee	T. Madison
Queen	T. Silurian	T. Point Lookout	T. Elbert
Grayburg	T. Montoya	T. Mancos	T. McCracken
San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
Glorieta	T. McKee	Base Greenhorn	T. Granite
Paddock	T. Ellenburger	T. Dakota	T.
Blinebry	T. Gr. Wash	T. Morrison	T.
Tubb	T. Delaware Sand 2122'	T. Todilto	T.
Drinkard	T. Bone Springs 4410'	T. Entrada	T.
Abo	T. Yeso	T. Wingate	T.
Wolfcamp 8428'	T. Ordovician	T. Chinle	T.
Penn Clastics	T. Morrow 10.720	T. Permian	T.
Cisco	T. Lower Morrow 10.988'	T. Penn "A"	T.

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....  
 No. 2, from.....to.....feet.....  
 No. 3, from.....to.....feet.....

## LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology



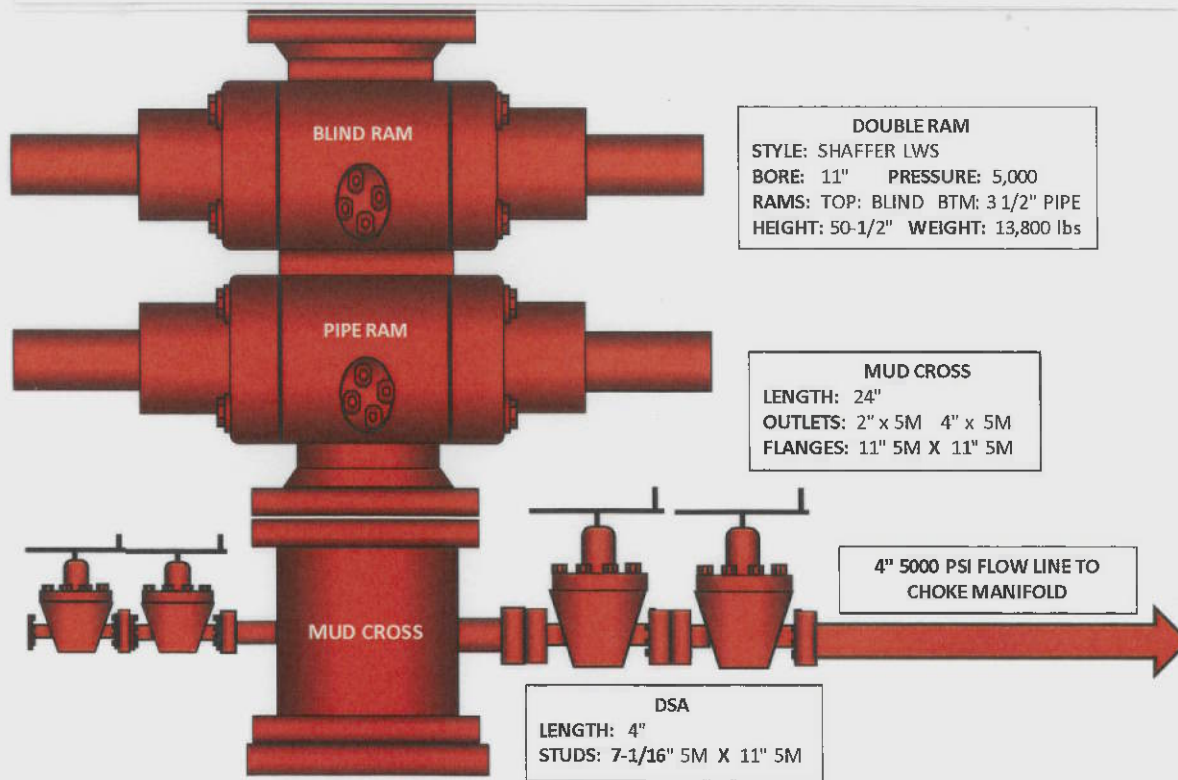
**SPC**  
Resources

SPC RESOURCES, LLC  
101 S. 4<sup>th</sup> Street, Suite B  
Artesia, NM 88210

## Nipple-Up

- Raise stack and center over the wellhead
- Install DSA and ring gaskets
- Lower stack onto DSA
- Torque DSA flange bolts in a star pattern to the specified torque
- Verify BOP is centered to the rotary table
- Install rotating head
- Install hydraulic lines to BOP
- Verify manifold line-up
- Test BOP & manifold

## 5M BOPE SCHEMATIC



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 192632

CONDITIONS

Operator: SPC RESOURCES, LLC P.O. Box 1020 Artesia, NM 88211	OGRID: 372262
	Action Number: 192632
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

CONDITIONS

Created By	Condition	Condition Date
gcordero	Set CIBP @ 10180' above ATOKA Perforations. Test casing 500psi/30min. spot 6 sacks cl H cement on plug with dump bailer. WOC & Tag or pump 25 sacks cl H cement. WOC & Tag	3/14/2023
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	3/14/2023