

Submit 1 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 August 1, 2011

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

WELL API NO. 30-015-00895
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. B-7690
7. Lease Name or Unit Agreement Name ARTESIA STATE UNIT
8. Well Number 301.
9. OGRID Number 274841
10. Pool name or Wildcat Artesia; Queen-Grayburg-San Andres

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH  
PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
Alamo Permian Resources, LLC

3. Address of Operator  
415 W. Wall Street, Suite 500, Midland, TX 79701

4. Well Location  
Unit Letter H : 1650 feet from the N line and 330 feet from the E line  
Section 14 Township 18S Range 27E NMPM County EDDY

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐

OTHER: CLEAN OUT, ADD PERFS, ACIDIZE  
☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

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.

SEE ATTACHED

NM OIL CONSERVATION  
ARTESIA DISTRICT

Spud Date:

Rig Release Date:

FEB 27 2015

RECEIVED

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

SIGNATURE

*Carie Stoker*

TITLE: Regulatory Affairs Coordinator

DATE 02/25/2015

Type or print name

CARIE STOKER

E-mail address: carie@stokeroilfield.com

PHONE: 432-664-7659

APPROVED BY:

*[Signature]*

TITLE

*[Signature]*

DATE

2/27/2015

Conditions of Approval (if any):

## ALAMO PERMIAN RESOURCES, LLC

### ARTESIA STATE UNIT #301 CLEAN-OUT, ADD PERFS, & ACIDIZE PROCEDURE

1. MIRU PU & BOP's. Be sure well is dead and blown down. If well tries to flow back — flow well back either into vacuum truck(s) if flowback is weak, or down flowline Artesia State Unit Battery. If flowback appears to be strong. In either case, take flowback to Artesia State Unit Battery production gun barrel or inlet production tank.

2. **THIS WELL HAS 7" 20# J-55 PRODUCTION CASING set at 1,725' with OPEN-HOLE from 1,725'-1,863' (PBDT) and Original TD of 1,888'.**

We will need to use a 6-1/2" Casing Scraper for cleaning the Casing and a 6-1/8" Rock Bit for cleaning out the Open-Hole to TD. We can use either the 2-3/8" or 2-7/8" workstring for this workover.

This well was originally drilled by Dale Resler of Artesia, NM in February-March 1945 and completed as an Open-Hole Completion from 1,725'-1,888' in the QN-Locho Hills, GB-Upper Grayburg, and GB-Metex zones from 1,788'-1,848' (overall interval — based on cable tool indicated oil zones while drilling).

Alamo Permian last worked on the Artesia State Unit #301 well in August 2013 & October 2013. Copies of the Morning Reports from those workovers are included in the Workover Procedure Package. During the August 2013 workover, over 60' of fill was found in the openhole section of the well — this fill was bailed and found to be scale, rust, iron sulfide, and salt. A PBDT of 1,863' was found using the bailer — 25' above the original TD of 1,888'. An earlier workover in May 2012 found PBDT @ 1,873' using a 5-1/2" bit. Using the 6-1/8" rock bit and the Aztec reverse unit, we will attempt to clean the well out to 1,888'. The October workover was a rod job which replaced 14 bad 5/8" rods with 3/4" rods in the well. Alamo records show that the 2-3/8" tubing was run in the hole with a TAC set at 1,659.30' (with 9,000# tension), seat nipple is set at 1,756.48' with 4" slotted sub and a 1-joint 2-3/8" mud anchor with EOT at 1,792.13'.

See Wellbore Diagram for perforations detail — updated 02/24/2015.

**PROVIDE A DETAILED TALLY & DESCRIPTION OF TUBING, PUMP, RODS, TAC AND ANY OTHER DOWNHOLE EQUIPMENT PULLED FROM THIS WELL IN THE MORNING REPORT FOR OUR RECORDS.**

Visually inspect Tubing, Pump, Rods, & TAC coming out of hole. Send Pump & TAC in for Repair/Replacement depending on condition.

**Current Completion:** 1,725" — 1,888' Open-Hole (163' Overall interval)

3. Run in hole with a 6-1/6" mill tooth skirted rock bit and 7" rotating casing scraper on 2-3/8" workstring and clean out wellbore to **PBDT at +/- 1,888'**. Catch samples of any material recovered from well and send to Tech Management for analysis. Note any bridges or hard streaks in report. While at TD, circulate hole clean using clean produced water from Artesia State Unit or WAGU Water Injection Station. POOH with bit and scraper.

**REMEMBER:** Very hard, dehydrated Fill has been encountered in all Artesia State Unit WIW's worked on during this program. This hard compacted Fill is made up of Iron Sulfide, Formation Sand, Frac Sand, Scale, Paraffin, and Asphaltenes. Drilling it out has required the use of Aztec Well Service's reverse unit & power swivel with a bit and 4-6 Drill Collars.

4. THERE IS NO OPEN HOLE OR CASED HOLE LOG ON FILE FOR THIS WELL.

RU Warrior Energy Service Corp. logging company and run cased-hole GR/CNL/CCL log for perforating and correlation from PBTD at +/- 1,888' to base of Surface Casing at 320'.

This will include logging within the 7" Casing String from 1,725' up to 320'.

Log should show porosity based on Sandstone Matrix, Dolomite Matrix, & Limestone Matrix.

Email log directly from wellsite to **BOTH**: Pat Seale at [pseale@alamoresources.com](mailto:pseale@alamoresources.com) and Tom Fekete at [jordanrubicon@msn.com](mailto:jordanrubicon@msn.com).

We will review GRN/CCL log and perms for potential additional perforation zones based on the porosity intervals found on this log.

5. Perforation Intervals in the **ARTESIA STATE UNIT #301** well will be determined from the GR/CNL/CCL log run.

6. Acidize LOCO HILLS, UPPER GRAYBURG, & METEX Open-Hole Intervals from 1,725' - 1,888':

- 163' Overall;
  - Estimated 45' of Porosity Intervals > 8% in the Open-Hole
- in 4 Stages using Rock Salt for Diversion of acid during Job.

Acid Job Total:

- 8,600 gal 15% NEFE HCl (204.8 Bbls)

- 191.1 gal/ft of Porosity > 8%.

with acid booster, anti-sludge, paraffin solvent, scale inhibitor, and demulsifiers; pumped at 5.0-6.0 BPM.

- Run in hole with 7" Treating Packer on 2-3/8" workstring.
- Set Treating Packer inside 7" Casing at approximately 1,675'.

Acidize the perforations in 4 Stages using Rock Salt as diverting agent between Stages:

**STAGE 1:** PUMP 15% NEFE HCl Acid to end of 2-3/8" workstring with 7" Treating Packer set at approximately 1,675'.

Set 7" Treating Packer Set at approx. 1,675'.

**ACIDIZE STAGE 1** with a total of 3,400 gal 15% NEFE HCl (81.0 bbls) + additives, increasing pump rate after breakdown to 5.0-6.0 BPM.

**PUMP 400# ROCK SALT** in Artesia State Unit or WAGU produced water as Diverting Agent between Stage 1 and Stage 2.

**STAGE 2:** PUMP 2,600 gal 15% NEFE HCl ACID (61.9 bbls) + additives at 5.0-6.0 BPM.

**PUMP 400# ROCK SALT** in Artesia State Unit or WAGU produced water as Diverting Agent between Stage 2 and Stage 3.

**STAGE 3:** PUMP 1,300 gal 15% NEFE HCl ACID (30.9 bbls) + additives at 5.0-6.0 BPM.

**PUMP 400# ROCK SALT** in Artesia State Unit or WAGU produced water as Diverting Agent between Stage 3 and Stage 4.

**STAGE 4: PUMP 1,300 gal 15% NEFE HCl ACID (30.9 bbls) + additives at 5.0-6.0 BPM.**

Pump approximately **15.2 Bbls Fresh Water** to displace acid to bottom of open-hole at 1,888'.

Shut-in well and record Shut-In Pressures: Initial Shut-in; 5-minute S/I; 10-minute S/I; & 15-minute S/I.

Leave well Shut-in for 4 hours for acid to spend.

Flow back well into vacuum trucks until it lays down and dies. If well flows back more than 2 truck loads of water – hook up well to line and flowback to Artesia State Unit production Battery until it dies.

Truck any Oil recovered during Flowback to Artesia State Unit production Battery.

POOH with 7" Treating Packer and workstring.

**7. IF NEW PENROSE SANDSTONE PERFORATIONS ARE ADDED.**

**Acidize new PENROSE SANDSTONE perfs from approximately 1,450' – 1,470':**

- 20' Overall;
- 20' of perforations
- 40 Perforations (36 New)

**Acid Job Total:**

- **2,000 gal 15% NEFE HCl (47.6 Bbls)**
- **100.0 gal/ft of perfs**
- **50.0 gal/perf**

with acid booster, anti-sludge, paraffin solvent, scale inhibitor, and demulsifiers, **pumped at 5.0-6.0 BPM.**

Re-Set Retrievable Bridge Plug at approximately 1,525'.

Set Treating Packer at approximately 1,300'.

Spot **2.0 Bbls of 15% NEFE HCL** plus additives across Penrose Perfs (1450'-1,470') – Pull up to approximately 1,300' & reverse out tubing – Set Treating Packer at approximately 1,300'.

Pump a total of **2,000 gal 15% NEFE HCl plus additives** down tubing at **5-6 BPM** after acid is on perfs and perfs have broken down.

Pump +/- **8.0 Bbls Fresh Water** to displace acid to bottom of perforations at 1,470'.

Shut-in well and record Shut-In Pressures: Initial Shut-in; 5-minute S/I; 10-minute S/I; & 15-minute S/I.

Shut well in 4 hours for acid to spend.

**8. Open well up to flow back into vacuum trucks on location initially. Take the first 2 truckloads of flow back to commercial disposal site.**

If well should continue to flow back – tie well in to flowline and flow back to the Artesia State Unit production Battery until it dies. May need to put pulling unit rig on standby during these flowback times in order to keep workover costs down.

Truck any Oil recovered during Flowback to Artesia State Unit production Battery.

9. Release Retrievable Treating Packer, go down and retrieve RBP & POOH with RBP, packer, and workstring. Have water truck on hand to kill well if it tries to come in during trip.
10. Trip in hole with 2-3/8" workstring with muleshoe on bottom & tag for fill to PBTD. Circulate hole clean with water truck using **Fresh Water** at least at least 2 times around in order to dissolve rock salt. POOH with workstring and muleshoe.
11. Run in hole with 2-3/8" 4.7# J-55 Production Tubing string and 7"x2-3/8" TAC.  
Run Tubing & Downhole Equipment configuration as follows:
  - 2-3/8" 4.7# J-55 Tubing to +/- 1,430' (Above Penrose Perfs: 1,450'-1,470')
  - 4-1/2"x2-3/8" TAC
  - 2-3/8" 4.7# J-55 Tubing to +/- 1,718'
  - Endurance Joint
  - 2-3/8" Seating Nipple (set at +/- 1,752' - 27' into Open-Hole 1,725'-1,888')
  - 2-3/8" x 2-7/8" X-Over
  - 4' - 2-7/8" Slotted Sub
  - 2 jts. - 2-7/8" Mud Anchor Joint with Bull Plug on bottom. (EOT at +/- 1,820' - 68' off btm)
  - Run similar Rod Configuration as was run on 08/28/2013 (May need to replace some rods & couplings, or install KD Rods at this time, depending of condition of equipment in hole.)
  - 1" x 3/4" Lift Sub
  - 20-150-12' RWBC Pump with 24' - 1" Gas Anchor on bottom (run into Mud Anchor).

**Pressure test tubing to 5,000 psig while going in hole.**

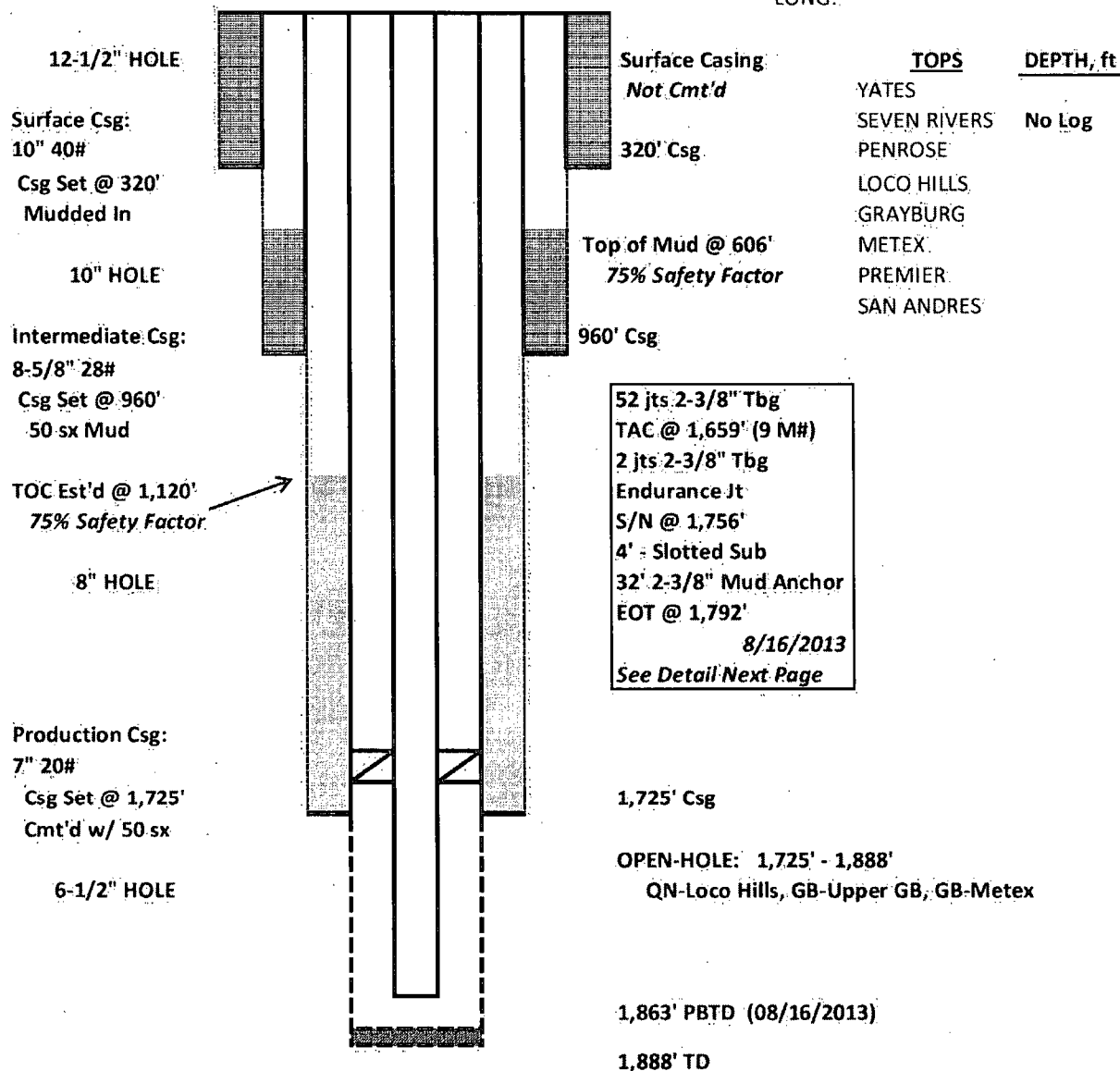
12. Check Pump for good pump action.
13. RDMO Pulling Unit rig.
14. Return well to Production and report Daily Production Tests to Midland Office.

H. Patrick Seale  
February 24, 2015

**ALAMO PERMIAN RESOURCES, LLC**  
**WELLBORE DIAGRAM**

Lease/Well No.: **ARTESIA STATE UNIT #301** ELEVATION, GL: 3,636 ft  
 Location: 1,650' FNL & 330' FEL  
 UL: H, SEC: 14, T: 18-S, R: 27-E FIELD: **ARTESIA: QN-GB-SA**  
 EDDY County, NM  
 LEASE No.: State B-7690 Spudded: 2/8/1945  
 API No.: **30-015-00895** Drlg Stopped: 3/20/1945  
 Completed: 3/23/1945  
 LAT:  
 LONG:

**CABLE TOOL DRLG RIG**



Drilled by DALE RESLER (Artesia, NM) as the JONES STATE #2 well in 1945.  
 Re-Named the NEW MEXICO STATE "C" #3 - 10/16/68. Re-Named the ARTESIA STATE UNIT TRACT 3  
 #1 well - 12/01/74. Re-Named the ARTESIA STATE UNIT #301 - 06/10/2011.  
 \* ACTUAL CUMM's 12/31/2014: 26.316 MBO, 0.244 MMCF, 43.467 MBW (NMOCD).

**Cumulative Prod. (12/31/14):**

OIL 26.306\* MBO  
 GAS 0.244 MMCF  
 WATER 43.312\* MBW  
 INJECT. 0.000 MBW

HPS: 02/20/2015

# ARTESIA STATE UNIT #301

## WELL PERFORATION, ACID JOB, FRAC JOB, & WELL TEST DETAILS

PERFS			ACID JOB(S)			FRAC JOB(S)					INITIAL POTENTIAL TEST				
TOP	BOTTOM	ZONE	DATE	ACID GALS	ACID TYPE	DATE	FRAC FLUID GALS	FLUID TYPE	SAND LBS	SAND SIZE	REMARKS	TEST DATE	OIL BOPD	GAS MCFD	WATER BWPD
1,725	1,888	OPEN-HOLE QN-LoCo Hills GB-Upper GB GB-Metex				3/23/1945	70 Qts	Nitro Glycerin			1790'-1808'	3/23/1945	150	0	0
All Zones Commingled															
-----															
1,725	1,888	OPEN-HOLE QN-LoCo Hills GB-Upper GB GB-Metex	1/21/2010	250	15% HCl w/1% Micellar Solvent							NO TESTS REPORTED			

## TUBING & RODS DETAIL: 08/16/2013

	Description	Length	Depth
Tubing	KB	6.00'	6.00'
	52' Jts 2 1/2" J55 EUE 8rd Tubing	1650.40'	1656.40'
	1 7"x2 1/2" TAC w/9000# Tension	2.90'	1659.30'
	2' Jts 2 1/2" J55 EUE 8rd Tubing	63.32'	1722.62'
	1 2-3/8" Endurance Joint	32.76'	1755.38'
	1 2 1/2" Seating Nipple	1.10'	1756.48'
	1 2 1/2" Slotted Sub	4.00'	1760.48'
	1 2 1/2" Mud Anchor w/Bull Plug	31.65'	1792.13'
Rods	1 1 1/2"x11 Polish Rod w/1 1/2" Liner	7.00'	
	21 3/4" Rods	525.00'	
	48 5/8" Rods	1200.00'	
	1 1"x3/4" Lift Sub	1.00'	
	1 20-150-10' RWC Pump	10.00'	
	Total	1743.00'	

COMPLETION & TEST DETAILS

ARTESIA STATE UNIT #301 - WBDiagram - 02-20-15.xlsx