

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

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.)		WELL API NO. 30-015-23113
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Injection Well <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Alamo Permian Resources. LLC		6. State Oil & Gas Lease No. E-7255
3. Address of Operator 415 W. Wall Street, Suite 500, Midland, TX 79701		7. Lease Name or Unit Agreement Name WEST ARTESIA GRAYBURG UNIT
4. Well Location Unit Letter J : 1650 feet from the S line and 1980 feet from the E line Section 8 Township 18S Range 28E NMPM County EDDY		8. Well Number 020
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 274841
		10. Pool name or Wildcat Artesia; Queen-Grayburg-San Andres

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
☒

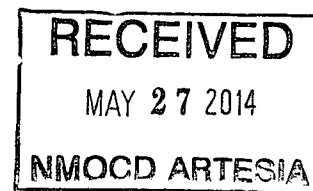
SUBSEQUENT REPORT OF:

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



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 05/21/2014

Type or print name CARIE STOKER E-mail address: carie@stokeroilfield.com PHONE: 432.664.7659

APPROVED BY: TC Shepard TITLE "Geologist" DATE 5-27-2014

Conditions of Approval (if any)

ALAMO PERMIAN RESOURCES, LLC

WAGU #020 -- CLEAN-OUT, ADD PERFS, & ACIDIZE PROCEDURE

1. MIRU PU & BOP's. Be sure well is dead and blown down. If wells tries to flow back – flow well back either into water truck(s) if flowback is weak, or via temporary poly line to WAGU Water Station inlet tank, if flowback appears to be strong. In either case, take flowback to WAGU Water Station inlet tank.
2. **THIS WELL HAS 9-5/8" 40# & 36# J-55 PRODUCTION CASING. The well was originally a deep dry hole drilled by Aminoil USA to a TD of 10,560' in 1980. The Production Tubing is 2-7/8" 6.7# J-55 EUE tubing. We will need to use the 2-7/8" workstring for this workover.**

Pull out of hole with rods and pump. Unseat TAC set at 1,969.01' with 10,000# tension during last workover on well, October 30, 2013. Pull out of hole with TAC and 2-7/8" tubing string

Visually inspect rods, tubing, & TAC while coming out of hole. Send both Pump & TAC in for Repair/Replacement depending on condition.

Description of downhole equipment run on 10/31 & 31/2013:

	Description	Length	Depth
Tubing	KB	6.00'	6.00'
	61 Jts 2-7/8" J55 EUE 8rd Tubing	1895.27'	1901.27'
	1 2"x2-7/8" Marker Sub	2.00'	1903.82'
	2 Jts 2-7/8" J55 EUE 8rd Tubing	63.74'	1967.01'
	1 9-5/8"x2-7/8" TAC set w/10K Tension	2.90'	1969.91'
	8 Jts 2-7/8" J55 EUE 8rd Tubing	238.46'	2208.37'
	1 2-7/8" Endurance Joint	32.57'	2240.94'
	1 2-7/8" Seating Nipple	1.10'	2242.04'
	1 2-7/8" Mule Shoe	15.00'	2257.04'
Rods	1 1 1/4"x16.00' Polish Rod w/1 1/2" Liner	16.00'	
	3 3/4" Pony Subs, 1 each: 4', 8', 8'	20.00'	
	88 3/4" Rods	2175.00'	
	1 3/4" Lift Sub	1.00'	
	1 25-175-16" RXBC Pump	16.00'	
	<i>Total</i>	2228.00'	

Current Perforations: 2,041' – 2,184' (143' Overall interval) – 14' of perforations (28 holes).
Planned New Perforations: 2,038' – 2,332' (294' Overall interval) – 111' of perforations (250 holes).
Total Perfs after W/O: 2,038' - 2,332' (294' Overall Interval) – 111' of perforations (278 holes).

See Wellbore Diagram for perforations detail – updated 05/24/2014.

3. Run-in hole with 8-1/2" mill tooth skirted rock bit and 9-5/8" rotating casing scraper on 2-7/8" workstring and clean out wellbore to PBTD at approximately 2,754'. 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 WAGU Water Injection Station. POOH with bit and scraper.

REMEMBER: Paraffin has been encountered in offset wells. If excessive paraffin is encountered, pour 10 gal diesel down tubing and cut paraffin from tubing string with paraffin knife – pouring additional 5 gal

diesel down tubing every knife run; or circulate well with hot water to clean paraffin out of tubing string. Paraffin, iron sulfide, sand, rust, and scale have been recovered in WAGU wells while cleaning out to bottom.

4. RU Logging Company and run GRN/CCL log for perforating correlation from PBTD at +/- 2,754' to base of Surface Casing at 405'. Email log directly from wellsite to Pat Seale at pseale@alamoresources.com and Tom Fekete at jordanrubicon@msn.com.

We will review GRN/CCL log and perms for correlation to GRN/CCL log run on 12/05/1980 and the original openhole log, prior to perforating

5. Perforate the WAGU #020 well over the following 16 intervals using 3-1/8" Hollow-Carrier slick perforating guns with 19-grain charges:

<u>Interval No.</u>	<u>Perf Interval</u>		<u>No. of Ft</u>	<u>SPF</u>	<u>No. of Perfs</u>
	<u>Top</u>	<u>Bottom</u>			
1	2,038'	2,050'	12'	2	24
2	2,067'	2,072'	5'	2	10
3	2,105'	2,109'	4'	2	8
4	2,120'	2,126'	6'	2	12
5	2,138'	2,142'	4'	2	8
6	2,146'	2,149'	3'	2	6
7	2,152'	2,156'	4'	2	8
8	2,165'	2,173'	8'	2	16
9	2,182'	2,186'	4'	2	8
10	2,206'	2,208'	2'	2	4
11	2,211'	2,221'	10'	2	20
12	2,232'	2,234'	2'	2	4
13	2,248'	2,252'	4'	2	8
14	2,269'	2,287'	18'	2	36
15	2,298'	2,306'	8'	2	16
16	2,311'	2,332'	21'	2	42
TOTALS			111'		222

6. **Acidize Perforated Intervals in 4 Stages** using **Rock Salt for Diversion of acid during Job.**

Acid Job Total: 10,500 gal 15% NEFE HCl (94.6 gal/ft of perfs – 42.0 gal/perf) with acid booster, anti-sludge, paraffin solvent, scale inhibitor, and demulsifiers, **pumped at 5.0-6.0 BPM.**

Trip in hole with rental 9-5/8"x2-7/8" retrievable treating packer on workstring. Set packer above perforations at approximately 1,950'. Acidize the perforations in 4 Stages using Rock Salt as diverting agent between Stages:

STAGE 1: **SPOT 15% NEFE HCl** across Perfs from 2,038'-2,332' inside the 9-5/8" production casing in the well.
Pick up packer and set at +/- 1,950'.

ACIDIZE STAGE 1 with a total of 4,000 gal 15% NEFE HCl (95.24 bbls) + additives, increasing pump rate after breakdown to 5.0-6.0 BPM.

PUMP 400# ROCK SALT in WAGU produced water as Diverting Agent between Stage 1 and Stage 2.

STAGE 2: **PUMP 2,500 gal 15% NEFE HCl ACID (59.5 bbls) + additives at 5.0-6.0 BPM.**

PUMP 400# ROCK SALT in WAGU produced water as Diverting Agent between Stage 2 and Stage 3.

STAGE 3: **PUMP 2,000 gal 15% NEFE HCl ACID (47.6 bbls) + additives at 5.0-6.0 BPM.**

PUMP 400# ROCK SALT in WAGU produced water as Diverting Agent between Stage 3 and Stage 4.

STAGE 4: **PUMP 2,000 gal 15% NEFE HCl ACID (47.6 bbls) + additives at 5.0-6.0 BPM.**

Pump +/- 29.1 Bbls **Fresh Water** to displace acid to bottom of perforations at 2,332'.

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.

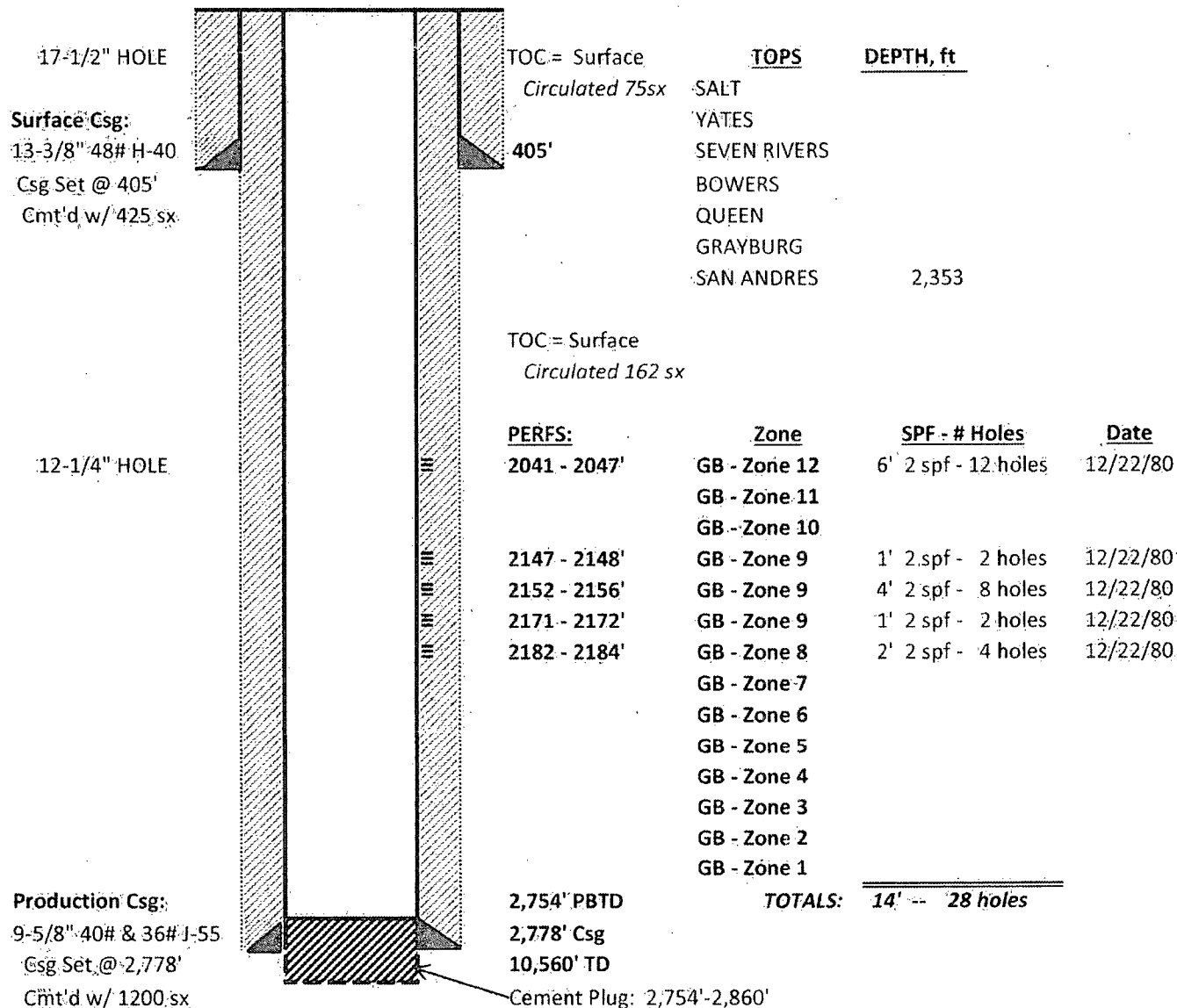
7. Open well up to flow back into water trucks on location initially. Take the first 2 truckloads of flow back to commercial disposal site. If well should continue to flow back — tie well in to flow back to the WAGU Water Station inlet tank until it dies. May need to put pulling unit rig on standby during these flowback times in order to keep workover costs down.
8. Release treating packer & POOH with packer and workstring. Have water truck on hand to kill well if it tries to come in during trip.
9. Trip in hole with 2-7/8" workstring with muleshoe on bottom & tag for fill. 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.
10. Run in hole with 2-7/8" tubing & 9-5/8"x2-7/8" TAC.
Be sure to replace 15' — 2-7/8" Muleshoe Joint below Seating Nipple with 2-7/8" Slotted Sub with X-overs to 3-1/2" EUE J-55 8rd Mud Anchor with BP on bottom.
Also replace insert pump with 2-7/8" tubing pump in well.
Space out and add tubing and rods as necessary to place seating nipple below bottom perf at 2,332'.
11. Pressure test tubing to 5,000 psig while going in hole.
Set TAC at +/- 1,975'. Run pump & rods. Check pump for good pump action. RDMO Pulling Unit rig.
12. Return well to production and report daily tests to Midland Office.

H. Patrick Seale
May 20, 2014

ALAMO PERMIAN RESOURCES, LLC
WELLBORE DIAGRAM

Lease/Well No.:	WAGU No. 020	ELEVATION, GL:	3,627 ft
Location:	1,650' FSL & 1,980' FEL		
	UL: J, SEC: 8, T: 18-S; R: 28-E	FIELD:	ARTESIA: QN-GB-SA
	EDDY County, NM	<u>Original Well</u>	<u>Re-Entry Well</u>
LEASE No.:	State E-7255-1	Spudded:	1/16/1980 12/2/1980
API No.:	30-015-23113	Drlg Stopped:	3/17/1980 12/5/1980
		Completed:	P&A 'd 05/27/80 12/22/1980

ROTARY TOOLS



Originally Drilled as Aminoil 8 State Comm #1 by Aminoil USA to TD of 10,560'.
 Dry Hole - Cisco Canyon, Strawn, Miss. 5-1/2" Csg set @ 9,468' for Testing of Well.
 P&A'd 5/27/80 - Pulled 5-1/2" csg from 6,867'. Cmt Plug @ btm 2,754'-2,860'.
 Marbob Energy Corp. Re-Entered well in December 1980. Completed well in GB &
 Re-Named as West Artesia Grayburg Unit - Tract 6 #20.

Cumulative Prod. (12/31/13):

OIL	42,732	MBO
GAS	5,798	MMCF
WATER	83,867	MBW
INJECT.		MBW

HPS: 05/20/2014

WAGU No. 020

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
2,041	2,047	Grayburg				12/20/1980	20,000	Gelled Wtr	30,000	20/40		12/23/1980	40	0	10
									30,000	10/20			All Zones		
2,147	2,148	Grayburg				12/20/1980	20,000	Gelled Wtr	30,000	20/40					
2,152	2,156	Grayburg							30,000	10/20					
2,171	2,172	Grayburg													
2,182	2,182	Grayburg													