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

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

Form C-103
Revised August 1, 2011

WELL API NO.
30-015-21454

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
B-10456

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.)

7. Lease Name or Unit Agreement Name
ARTESIA STATE UNIT

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

8. Well Number 501

2. Name of Operator
Alamo Permian Resources. LLC

9. OGRID Number
274841

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

10. Pool name or Wildcat
Artesia; Queen-Grayburg-San Andres

4. Well Location
Unit Letter I : 1330 feet from the S line and 10 feet from the E line
Section 14 Township 18S Range 27E NMPM County EDDY

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: CLEAN OUT, ADD PERFS, & ACIDIZE ☒		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
DEC 15 2014
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 12/10/2014

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

APPROVED BY: KR Davis TITLE DIST Supervisor DATE 12/19/14
Conditions of Approval (if any):

ALAMO PERMIAN RESOURCES, LLC

ARTESIA STATE UNIT #501
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 4-1/2" 10.5# J-55 PRODUCTION CASING.**
We will need to use the 2-3/8" workstring for this workover.

   This well was originally drilled by Anadarko Production Company in February 1975 and completed in the QN-Loco Hills, GB-Upper Grayburg, and GB-Metex zones from 1,718'-1,902' (overall). The QN-Penrose SS was added in May 1985 from 1,463'-1,481'.

   Alamo Permian last worked on the Artesia State Unit #501 well in August 2013. A copy of the Morning Report from that workover is included in the Workover Procedure Package. During the workover, the downhole pump was found stuck in the tubing. A bit & scraper were run to 1,902' & fill was noted to be at 1,939' – the well was not cleaned out to the PBTD is at 2,006' during this workover. A 15' – 2-3/8" Mule-Shoe Mud Anchor was run back in the well with no gas anchor. Records show that 2-3/8" tubing was run with a TAC set @ 1,636' (with 8,000# tension), S/N @ 1,893', and EOT @ 1,908'.

   See Wellbore Diagram for perforations detail – updated 12/09/2014.

   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 Perforations:	1,463' – 1,902' (439' Overall interval) – 50' of perforations (100 perfs).
Planned New Perforations:	**1,463' – 1,930' (467' Overall interval) – 57' of perforations (114 perfs).**
Total Perfs after W/O:	**1,463' – 1,930' (467' Overall Interval) – 57' of perforations (214 perfs).**

3. Run in hole with a 3-1/2" mill tooth skirted rock bit and 4-1/2" rotating casing scraper on 2-3/8" workstring and clean out wellbore to **PBTD at +/- 2,006'**. 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.

If excessive paraffin is encountered, pour 10 gal of 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 & paraffin solvent chemicals to clean paraffin out of tubing string. Paraffin, iron sulfide, sand, rust, and scale have been recovered in many of these old wells while cleaning out to bottom.

4. RU **Warrior Energy Service Corp.** logging company and run cased-hole GRN/CCL log for perforating correlation from PBTD at +/- **2,006'** to base of Surface Casing at **285'**.

   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 and Tom Fekete at jordanrubicon@msn.com.

   We will review GRN/CCL log and perfs for correlation to old GRN/CCL log run on 03/19/1974, prior to perforating.

5. Perforate the **ARTESIA STATE UNIT #901** well over the following **8 intervals** using 3-1/8" Hollow-Carrier slick perforating guns with 19-grain charges:

Interval No.	Perf Interval Top	Bottom	No. of Ft	SPF	No. of Perfs	Zone
1	1,463'	1,483'	18'	2	36	QN – Penrose SS
2	1,718'	1,722'	4'	2	8	QN – Loco Hills SS
3	1,727'	1,732'	5'	2	10	QN – Loco Hills SS
4	1,795'	1,798'	3'	2	6	GB – Upper Grayburg
5	1,827'	1,830'	3'	2	6	GB – Metex
6	1,834'	1,842'	8'	2	16	GB – Metex
7	1,852'	1,856'	4'	2	8	GB – Metex
8	1,868'	1,872'	4'	2	8	GB – Metex
9	1,895'	1,898'	3'	2	6	GB – Metex
10	1,900'	1,902'	2'	2	4	GB – Metex
11	1,927'	1,930'	3'	2	6	GB – Metex
TOTALS			57'		114 Perfs	

6. **Acidize LOCO HILLS, UPPER GRAYBURG, & METEX Perforated Intervals from 1,718'- 1,930':**
   - **212' Overall;**
   - **39' of perforations**
   - **142 perforations (78 New + 64 Old perfs)**

   in 4 Stages using Rock Salt for Diversion of acid during Job.

   Acid Job Total:

   - **7,500 gal 15% NEFE HCl (178.6 Bbls)**
   - **192.3 gal/ft of perfs**
   - **52.8 gal/perf)**

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

   - Run in hole with Treating Packer on 2-3/8" workstring with Retrievable Bridge Plug setting tool and RBP below packer.
   - Set Retrievable Bridge Plug at approximately **1,980'**.
   - Set Treating Packer at approximately **1,600'**.

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

STAGE 1: **SPOT 3.0 Bbls 15% NEFE HCl (3.1 bbls)** across Perfs from 1,718'-1,930' (212') inside the 4-1/2" 10.5# production casing in the well.

Pick up Retrievable Packer and Set at approx. **1,600'**.

ACIDIZE STAGE 1 with a total of 3,000 gal 15% NEFE HCl (71.4 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 2,300 gal 15% NEFE HCl ACID (54.8 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 1,100 gal 15% NEFE HCl ACID (26.2 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 1,100 gal 15% NEFE HCl ACID (26.2 bbls) + additives at 5.0-6.0 BPM.**

Pump +/- **11.0 Bbls Fresh Water** to displace acid to bottom of perforations at **1,930'**.

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.

Release Treating Packer and unseat Retrievable Bridge Plug.

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

7. **Acidize new PENROSE SANDSTONE perfs from 1,463' – 1,481':**
   - **18' Overall;**
   - **18' of perforations**
   - **72 Perforations (36 New + 36 Old perfs)**

Acid Job Total:

- **3,600 gal 15% NEFE HCl (85.7 Bbls)**
- **200.0 gal/ft of perfs**
- **50.1 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 (1463'-1,481') – Pull up to approximately 1,300' & reverse out tubing – Set Treating Packer at approximately 1,300'.

Pump a total of **3,300 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 1,481'.

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 4-1/2"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: 1,463'-1,481')
    - 4-1/2"x2-3/8" TAC
    - 2-3/8" 4.7# J-55 Tubing to +/- 1,880'
    - Endurance Joint
    - 2-3/8" Seating Nipple (set at +/- 1,910' – 20' Above Bottom Perf @ 1,930')
    - 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.
    - 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 16' – 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
December 09, 2014

ALAMO PERMIAN RESOURCES, LLC
WELLBORE DIAGRAM

Lease/Well No.: **ARTESIA STATE UNIT #501** ELEVATION, GL: 3,514 ft

Location: 1,330' FSL & 10' FEL
UL: I, SEC: 14, T: 18-S, R:27-E FIELD: **ARTESIA: QN-GB-SA**
EDDY County, NM

LEASE No.: State B-10456 Spudded: 2/5/1975

API No. : **30-015-21454** Drlg Stopped: 2/9/1975

Completed: 8/28/1975

ROTARY DRLG RIG LAT:

LONG:

12-1/4" HOLE

Surface Csg:
8-5/8" 24# J-55
Csg Set @ 285'
Cmt'd w/ 210 sx
+ 6 sx Redi-Mix

TOC @ Surface
Topped Off - 5 sx

285' Csg

TOC @ Surface
Circulated 50 sx

TOPS (TEF)	DEPTH, ft
YATES	
SEVEN RIVERS	
PENROSE	1,458
LOCO HILLS	1,718
GRAYBURG	1,738
METEX	1,822
PREMIER	1,942
SAN ANDRES	NDE

7-7/8" HOLE

51 jts 2-3/8" Tbg
TAC @ 1,636' (8 M#)
7 jts 2-3/8" Tbg
Endurance Jt
S/N @ 1,892'
15' - 2-3/8" Mule Shoe Mud Anchor
EOT @ 1,908'
8/28/2013
See Detail Next Page

PERFS:	Zone	SPF - # Holes	Date
1463 - 1481'	QN - Penrose SS	18' 2 spf - 36 holes	05/20/85
1718 - 1722'	QN - Loco Hills	4' 2 spf - 8 holes	08/28/75
1727 - 1731'	QN - Loco Hills	4' 2 spf - 8 holes	08/28/75
1795 - 1798'	GB - Upper GB	3' 2 spf - 6 holes	08/28/75
1827 - 1830'	GB - Metex	3' 2 spf - 6 holes	08/28/75
1837 - 1842'	GB - Metex	5' 2 spf - 10 holes	08/28/75
1852 - 1856'	GB - Metex	4' 2 spf - 8 holes	08/28/75
1868 - 1872'	GB - Metex	4' 2 spf - 8 holes	08/28/75
1895 - 1898'	GB - Metex	3' 2 spf - 6 holes	08/28/75
1900 - 1902'	GB - Metex	2' 2 spf - 4 holes	08/28/75
	TOTALS:	*50' -- 100 holes*	

Production Csg:
4-1/2" 10.5# J-55
Csg Set @ 2,000'
Cmt'd w/ 735 sx

2,000' Csg
2,006' PBTD
2,010' TD

Drilled by ANADARKO PROD. CO. as the Artesia State Unit Tract 5 Well #1.
Penrose SS perfs added by Anadarko in MAY 1985.

*** ACTUAL CUMM's 10/31/2014: 60.261 MBO, 0 MMCF, 512.232 MBW (NMOCD).**

Cumulative Prod. (10/31/14):

OIL	40.568*	MBO
GAS	0.000	MMCF
WATER	453.155*	MBW
INJECT.	0.000	MBW

HPS: 12/09/2014

ARTESIA STATE UNIT #501

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
1,718	1,722	QN-Loco Hills				8/28/1975	20,000	Gel Wtr	24,250	20/40		9/24/1975	3	0	20
1,727	1,731	QN-Loco Hills										*All Zones Commingled*			
1,795	1,798	GB-Upper GB				8/28/1975	39,900	Gel Wtr	45,450	20/40					
1,827	1,830	GB-Metex													
1,837	1,842	GB-Metex													
1,852	1,856	GB-Metex													
1,868	1,872	GB-Metex													
1,895	1,898	GB-Metex													
1,900	1,902	GB-Metex													
1,463	1,481	QN-Penrose SS	5/20/1985	2,000	7.5% HCl	5/20/1985	10,500	Gel Wtr	25,500	12/20		AFTER FRAC JOB INCREMENTAL:			
													4	0	0

TUBING & RODS DETAIL: 08/28/2013

		Description	Length	Depth
Tubing		KB	3.00'	3.00'
	51	jts 2⅞" J55 EUE 8rd Tubing	1630.52'	1633.52'
	1	4½"x2⅞" TAC w/8000# Tension	2.90'	1636.42'
	7	jts 2⅞" J55 EUE 8rd Tubing	223.79'	1860.21'
	1	2⅞" EUE 8rd Endurance Joint	31.73'	1891.94'
	1	2⅞" Seating Nipple	1.10'	1893.04'
	1	2⅞" Muleshoe Mud Anchor	15.00'	1908.04'
Rods	1	1¼"x16.00' Polish Rod w/1½" Liner	12.00'	
	3	¾" Pony Subs, 1each: 4', 4', 6'	14.00'	
	38	⅞" Rods	950.00'	
	36	¾" Rods	900.00'	
	1	20-150- 12.00' RHBC Pump w/1.00'x3/4" Lift Sub Sub	13.00'	
		Total	1889.00'	

ARTESIA STATE UNIT #501 (formerly #001C)		
AFE: n/a	AFE Est. Gross Cost: n/a	Perfs: 1718 – 1902'
API: 30-015-21454	Lease: B-10456	Spud: 02/05/45
I-14-18S-27E	1330 FSL & 10 FEL	P&A: n/a
Eddy Co., NM	Pool: 3230 - ARTESIA;Queen-Grayburg-SA	

OBJECTIVE: Restore to production.

MORNING REPORTS FROM LAST WORKOVER ON WELL

08/26/13

HSM w/crew re PPE & trip hazards.

MIRU Aztec Rig #523. Unhang well. Rods parted at the pump. POOH w/rods. ND WH, NU BOP. Change rams to 2-7/8". Swab fluid dwn. POOH w/1443.09' of 2-7/8" J55 EUE 8rd tbg. Swap over to pull 2-3/8" tbg. POOH w/470.97' of 2-3/8" J55 EUE 8rd tbg. Pump stuck in tbg. Sent pump to shop. PU 4-1/2" csg scraper & RIH to 1902'. PUH to 1650'. SWI. SDFN.

Note: Plan to change out full-hole rod couplings tomorrow AM; LD 2-7/8" tbg & replace it w/2-3/8" tbg.

Note: Tag fill @ 1939.06' (37.00' of rathole).

DC: $3,800 CTD: $6,450 *from: S. Cockrum*

08/27/13

HSM w/crew re trip hazards & overhead loads.

No ONSITP. RIH w/rods. POOH laying dwn 7/8" rods to remove full hole spray metal boxes. Replaced worn ¾" rod boxes & hang rods in the derrick. POOH laying dwn 2-7/8" tbg. Stood back 2-3/8" tbg. SWI. SDFN. Haul 2-7/8" tbg to yard.

DC: $4,555 CTD: $10,005 *from: S. Cockrum*

08/28/13

HSM w/crew re clean work area & working together.

Off-load & tally 2-3/8" J-55 tbg. PU BHA & 2-3/8" tbg testing to 5000 psi, ok. RIH w/21 jts out off the derrick. Busted 3 jts. Replaced bad tbg. RD testers. ND BOP, NU WH. PU pump & rods. Replace all rod boxes. Space out rods & HWO. Test pump to 600 psi, ok. Clean location. RDMO. Well pumping to battery.

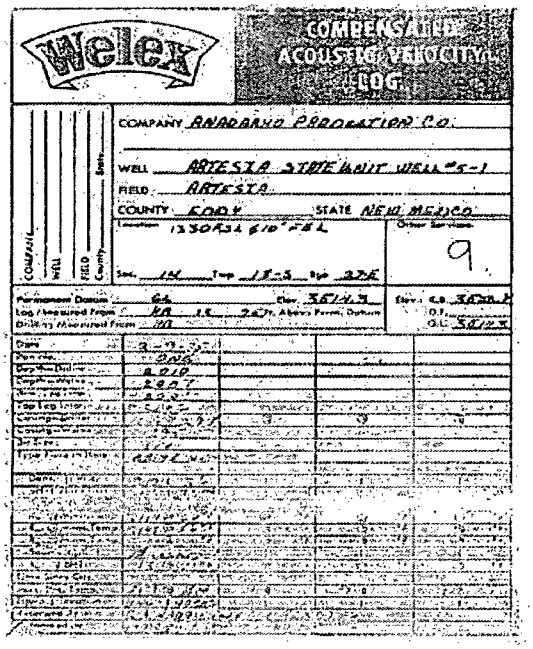
DC: $11,908 CTD: $21,913.00 *from: S. Cockrum*

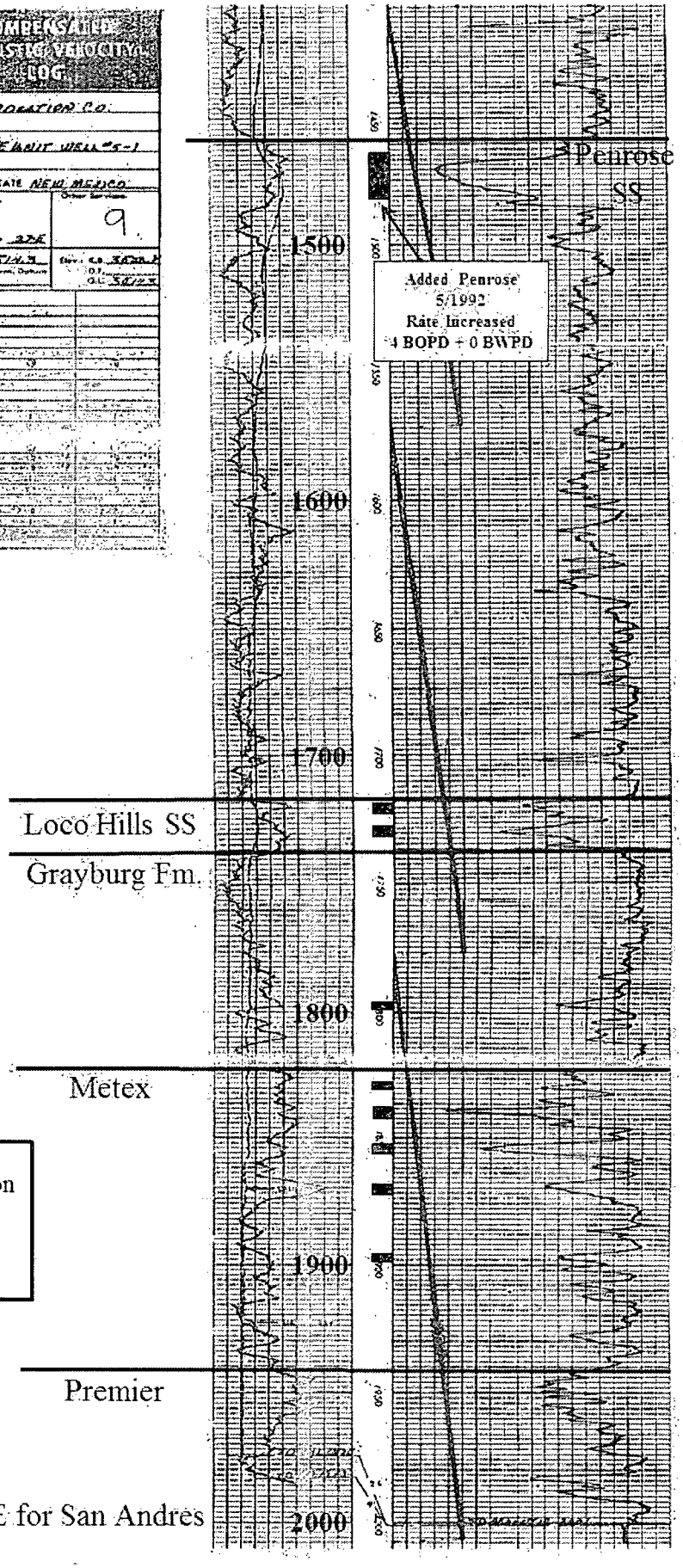
		Description	Length	Depth	
Tubing		KB	3.00'	3.00'	
	51	jts 2⅜" J55 EUE 8rd Tubing	1630.52'	1633.52'	
	1	4½"x2⅜" TAC w/8000# Tension	2.90'	1636.42'	TAC
	7	jts 2⅜" J55 EUE 8rd Tubing	223.79'	1860.21'	
	1	2⅜" EUE 8rd Endurance Joint	31.73'	1891.94'	
	1	2⅜" Seating Nipple	1.10'	1893.04'	S/N
	1	2⅜" Muleshoe Mud Anchor	15.00'	1908.04'	EOT
Rods	1	1¼"x16.00' Polish Rod w/1½" Liner	12.00'		
	3	¾" Pony Subs, 1each: 4', 4', 6'	14.00'		
	38	⅞" Rods	950.00'		
	36	¾" Rods	900.00'		
	1	20-150- 12.00' RHBC Pump w/1.00'x3/4" Lift Sub Sub	13.00'		
		Total	1889.00'		

Artesia State #501

30-015-21454

T-18-S, R-27-E, Sec. 14
1330' FSL & 10' FEL
Reference Elevation = 3524'





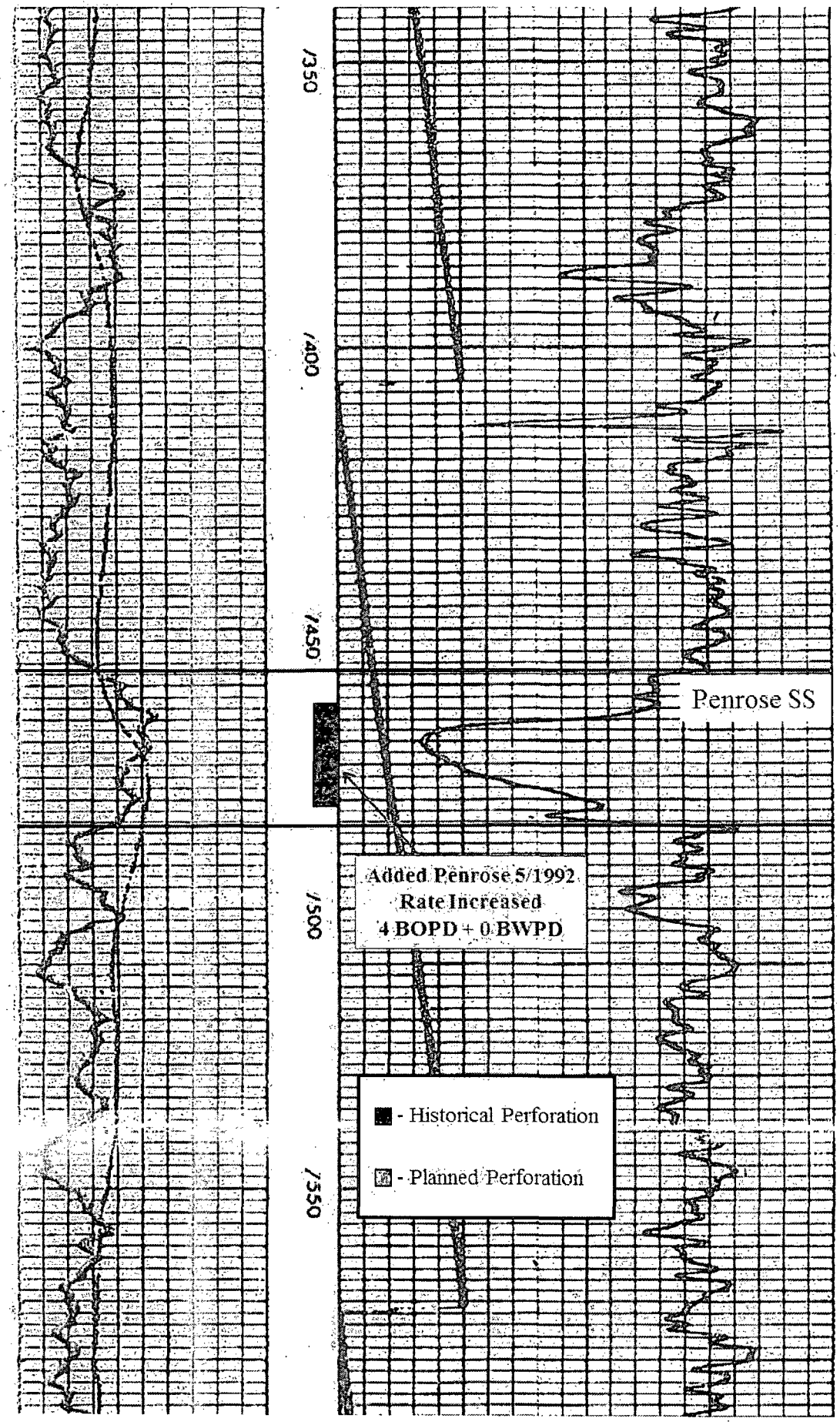
■ - Historical Perforation

□ - Planned Perforation

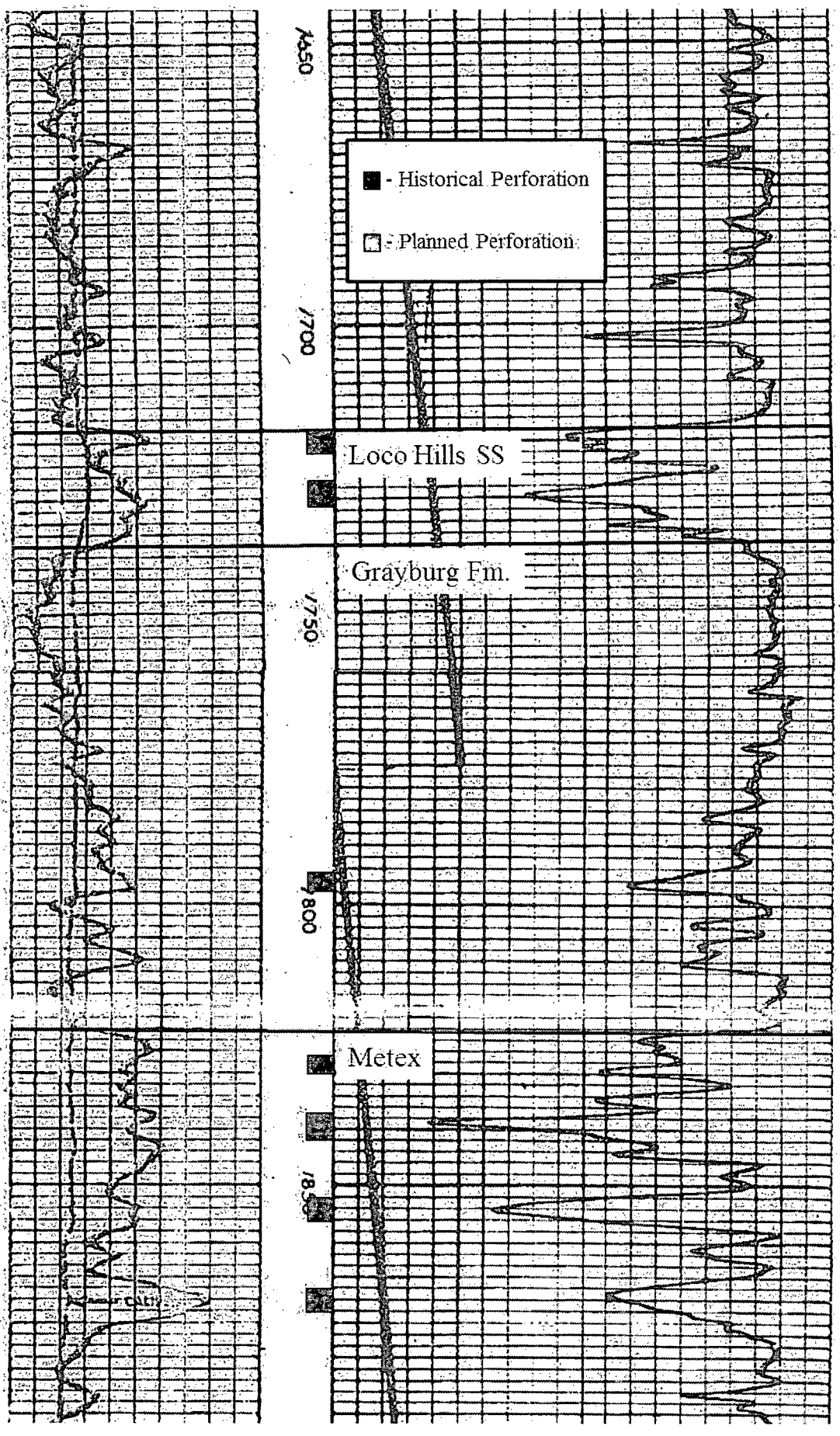
(6/30/2014)

NDE for San Andres

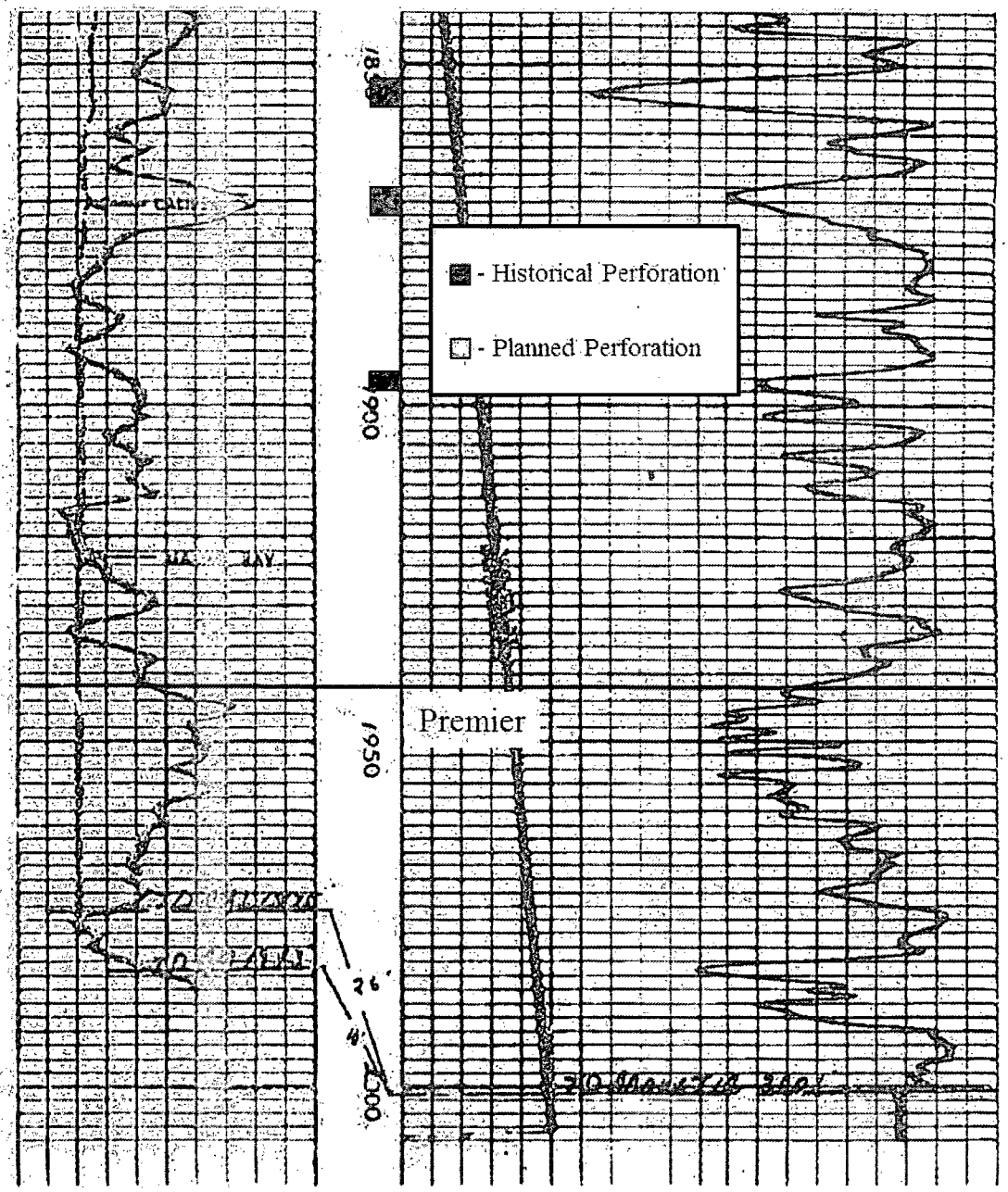
Artesia State #501



Artesia State #501



Artesia State #501



NDE for San Andres