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.
30-015-23619

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
B-11539

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
WEST ARTESIA GRAYBURG UNIT

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

8. Well Number 021

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 E : 1650 feet from the N line and 330 feet from the W line
Section 8 Township 18S Range 28E 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
JUN 30 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 06/26/2014

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

APPROVED BY: A Wade TITLE Dist II Supervisor DATE 7-1-14
Conditions of Approval (if any):

ALAMO PERMIAN RESOURCES, LLC

WAGU #021 -- 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 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 4-1/2" 10.5# J-55 PRODUCTION CASING.**
   We will need to use the 2-3/8" workstring for this workover.

   Description of downhole equipment run in well during last workover in August 2010:
   10' tbg sub w/BP as Mud Anchor; 4' PN; new SN; 76 jts 2⅜" 4.7 PPF EUE 8rd tubing. Landed tubing with SN @ 2,455' & EOT @ 2,470'. Ran new 2"x1½"x16' pump w/6" Gas Anchor on 96 - ¾" rods, with 1 - 6', 1 - 6', 1 - 6', & 1 - 2' rod subs.

   There is no record of a TAC being run in the well.

   Provide a detailed Tally & Description of all tubing, downhole equipment, pump, and rods pulled from the well in the Morning Report.

   Pull out of hole with rods and pump. Pull out of hole with 2-3/8" tubing string

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

   Current Perforations: 2,008' – 2,216' (208' Overall interval) – 34' of perforations (48 holes).
   Planned New Perforations: 1,940' – 2,240' (300' Overall interval) – 126' of perforations (252 holes).
   Total Perfs after W/O: **1,940'- 2,240' (300' Overall Interval) – 126' of perforations (300 holes).**

   See Wellbore Diagram for perforations detail – updated 06/25/2014.

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 approximately 2,504'. 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 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 WAGU wells while cleaning out to bottom.

4. RU Logging Company and run GRN/CCL log for perforating correlation from PBTD at +/- 2,504' to base of Surface Casing at 507'. 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 perfs for correlation to GRN/CCL log run on 02/16/1981, prior to perforating.

5. Perforate the WAGU #021 well over the following **17 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
1	1,940'	1,948'	8'	2	16
2	1,968'	1,974'	6'	2	12
3	1,978'	1,982'	4'	2	8
4	2,004'	2,014'	10'	2	20
5	2,020'	2,026'	6'	2	12
6	2,038'	2,044'	6'	2	12
7	2,050'	2,056'	6'	2	12
8	2,064'	2,074'	10'	2	20
9	2,078'	2,092'	14'	2	28
10	2,106'	2,120'	14'	2	28
11	2,132'	2,136'	4'	2	8
12	2,148'	2,154'	6'	2	12
13	2,172'	2,180'	8'	2	16
14	2,184'	2,188'	4'	2	8
15	2,198'	2,204'	6'	2	12
16	2,210'	2,216'	6'	2	12
17	2,232'	2,240'	8'	2	16
TOTALS			**126'**		**252**

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

Acid Job Total: 12,600 gal 15% NEFE HCl (100.0 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 4-1/2"x2-3/8" retrievable treating packer on workstring. Set packer above perforations at approximately **1,900'**. Acidize the perforations in 4 Stages using Rock Salt as diverting agent between Stages:

STAGE 1: **SPOT 210 gal 15% NEFE HCl (5.0 bbls)** across Perfs from 1,940'-2,240' (300') inside the 4-1/2" production casing in the well.
Pick up packer and set at +/- 1,900'.

ACIDIZE STAGE 1 with a total of 4,700 gal 15% NEFE HCl (111.9 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 3,700 gal 15% NEFE HCl ACID (88.1 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 2,100 gal 15% NEFE HCl ACID (50.0 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 2,100 gal 15% NEFE HCl ACID (50.0 bbls) + additives at 5.0-6.0 BPM.**

Pump +/- 13.5 Bbls **Fresh Water** to displace acid to bottom of perforations at 2,240'.

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 2-3/8" 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 2-3/8" tubing & 4-1/2"x2-3/8" TAC.
    Be sure to replace Muleshoe Joint below Seating Nipple with 2-3/8" Slotted Sub with X-overs to 2-3/8" EUE J-55 8rd Mud Anchor with BP on bottom.

    Also replace insert pump with 1-3/4" tubing pump in well (for 2-3/8" tbg).
    Space out and add tubing and rods as necessary to place seating nipple below bottom perf at approximately 2,260' or below.

11. Pressure test tubing to 5,000 psig while going in hole.
    Set TAC at +/- 1,900'. 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
June 25, 2014

ALAMO PERMIAN RESOURCES, LLC
WELLBORE DIAGRAM

Lease/Well No.: **WAGU No. 021** ELEVATION, GL: 3,627 ft

Location: 1,650' FNL & 330' FWL
UL: C, SEC: 8, T: 18-S, R:28-E FIELD: **ARTESIA: QN-GB-SA**
EDDY County, NM

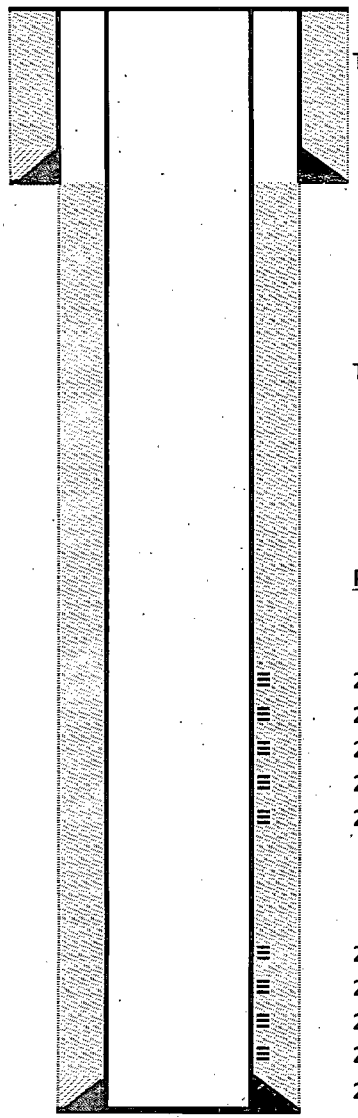
LEASE No.: State B-11539 Spudded: 2/3/1981

API No. : **30-015-23619** Drlg Stopped: 2/12/1981

Completed: 2/25/1981

ROTARY DRLG RIG LAT:

LONG:



12-1/4" HOLE

Surface Csg:
8-5/8" 24#
Csg Set @ 507'
Cmt'd w/ 300 sx

TOC = Surface
Circulated 50 sx

507' Csg

TOPS (TEF)	DEPTH, ft
SALT	
SEVEN RIVERS	
LOCO HILLS	1,940
GRAYBURG	1,953
METEX	2,038
PREMIER	2,163
SAN ANDRES	2,247

TOC = 520'
Temperature Log

6-1/4" HOLE

PERFS:	Zone	SPF - # Holes	Date
	GB - Zone 12		
	GB - Zone 11		
2008 - 2010'	**GB - Zone 10**	2' 2 spf - 4 holes	02/25/81
2040 - 2042'	**GB - Zone 9**	2' 2 spf - 4 holes	02/25/81
2052 - 2054'	**GB - Zone 9**	2' 2 spf - 4 holes	02/25/81
2086 - 2090'	**GB - Zone 8**	4' 2 spf - 8 holes	02/25/81
2114 - 2118'	**GB - Zone 7**	4' 2 spf - 8 holes	02/25/81
	GB - Zone 6		
	GB - Zone 5		
	GB - Zone 4		
2172 - 2180'	**GB - Zone 3**	8' 1 spf - 8 holes	02/25/81
2198 - 2202'	**GB - Zone 3**	4' 1 spf - 4 holes	02/25/81
2202 - 2204'	**GB - Zone 2**	2' 1 spf - 2 holes	02/25/81
2210 - 2216'	**GB - Zone 1**	6' 1 spf - 6 holes	02/25/81
2,520' Csg	***TOTALS:***	***34' --- 48 holes***	

Production Csg:
4-1/2" 10.5# J-55
Csg Set @ 2,520'
Cmt'd w/ 525 sx

2,504' PBTD (08/12/2010)
2,520' TD

Originally Drilled as WAGU Tract 2 #21 by Marbob Energy Corp.

Cumulative Prod. (04/30/14):

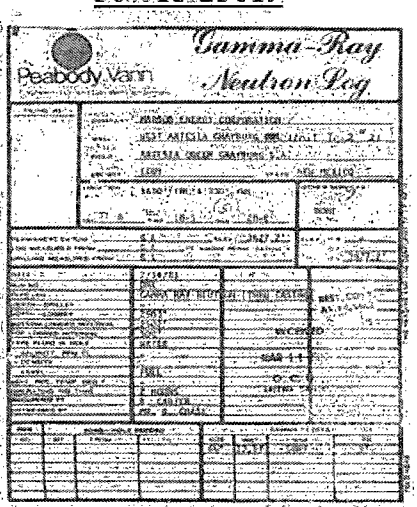
OIL	**48.249**	**MBO**
GAS	**20.830**	**MMCF**
WATER	**101.150**	**MBW**
INJECT.	**---**	**MBW**

HPS: 06/25/2014

WAGU #21

30-015-23619

T-18-S, R-28-E, Sec. 8
1650' FNL & 330' FWL
Reference Elevation = 3627'



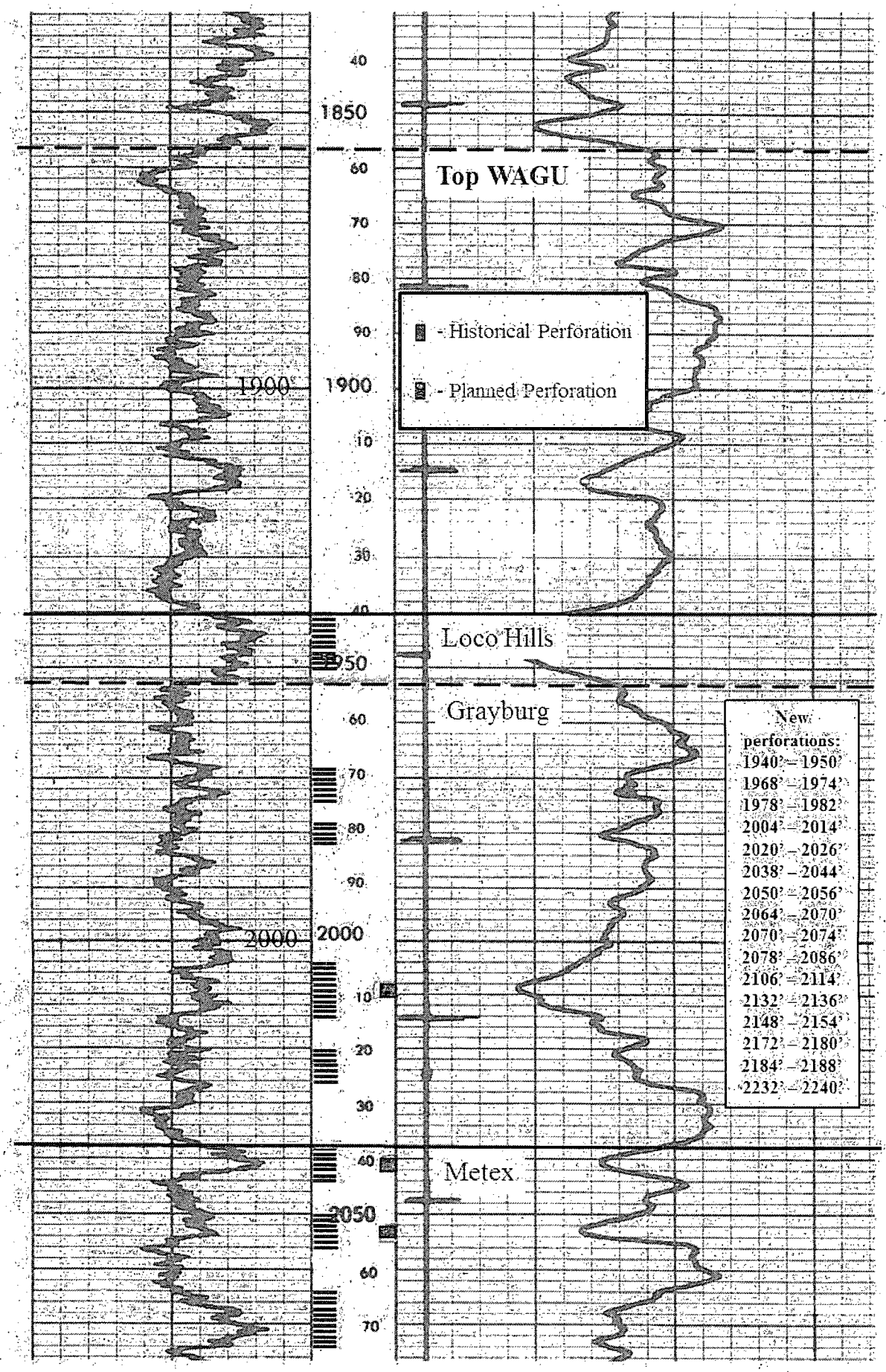
New perforations:

1: 40' – 1950'
1968' – 1974'
1978' – 1982'
2004' – 2014'
2020' – 2026'
2038' – 2044'
2050' – 2056'
2064' – 2070'
2070' – 2074'
2078' – 2086'
2106' – 2114'
2132' – 2136'
2148' – 2154'
2172' – 2180'
2184' – 2188'
2232' – 2240'

- Historical Perforation
- Planned Perforation

(10/27/2012)

WAGU #21


40
1850
60
Top WAGU
70
80
90
1900
1900
10
20
30
40
Loco Hills
1950
Grayburg
60
70
80
90
2000
2000
10
20
30
40
Metex
2050
60
70
- Historical Perforation
- Planned Perforation
New perforations:
1940' – 1950'
1968' – 1974'
1978' – 1982'
2004' – 2014'
2020' – 2026'
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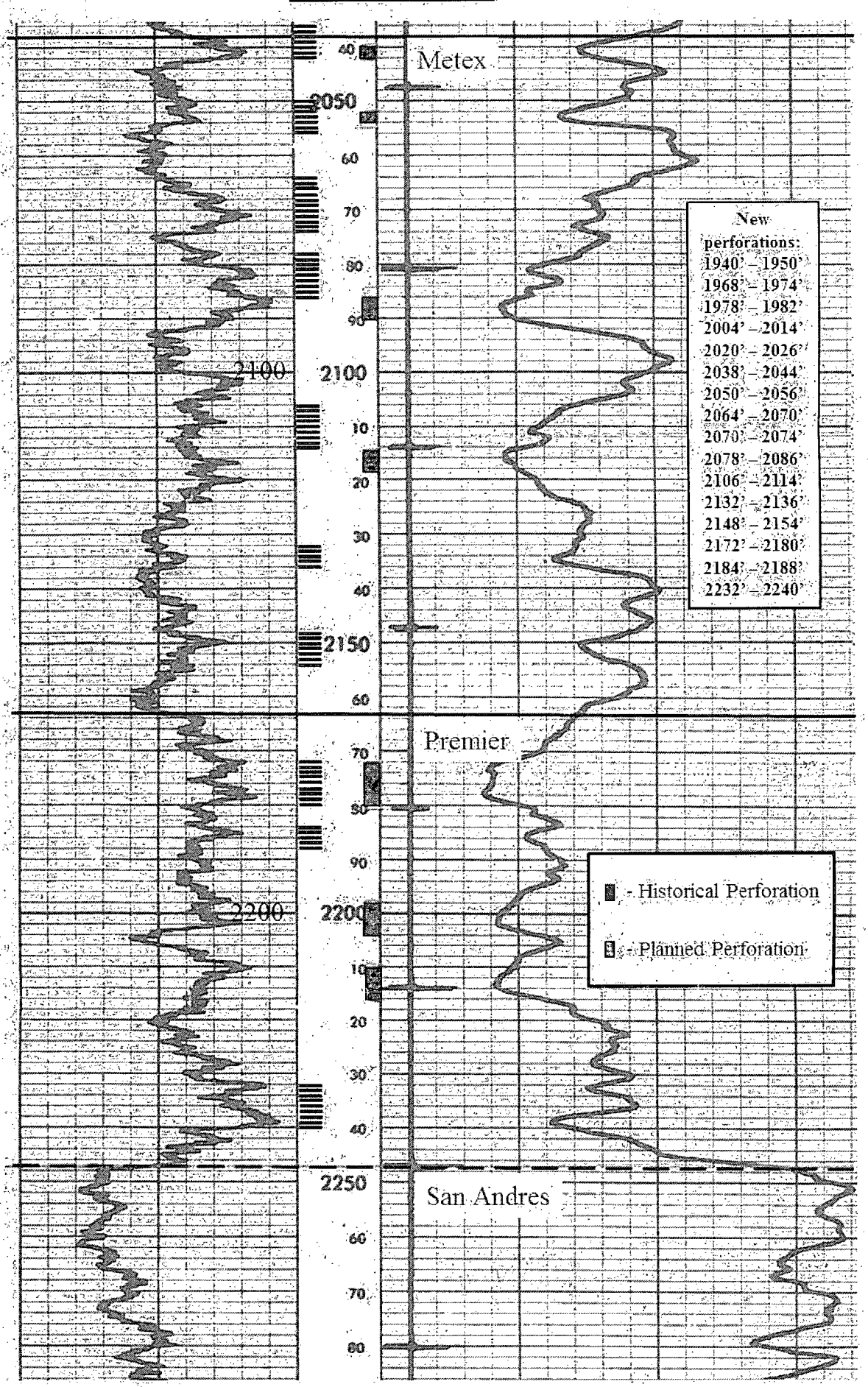
WAGU #21


Metex
Premier
San Andres
New perforations:
1940' – 1950'
1968' – 1974'
1978' – 1982'
2004' – 2014'
2020' – 2026'
2038' – 2044'
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- Historical Perforation
- Planned Perforation