ceined by Opp Po Appropriate 21: 31:41:5	State of New Mexico	Form C-103 of 1
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natural Reso	ources Revised July 18, 2013 WELL API NO.
<u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISI	ION 5 A F C C C
<u>District III</u> – (505) 334-6178	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE FEE
1000 Rio Brazos Rd., Aztec, NM 87410 District IV – (505) 476-3460	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM		
87505 SUNDRY NOT	ICES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name
	SALS TO DRILL OR TO DEEPEN OR PLUG BACK T CATION FOR PERMIT" (FORM C-101) FOR SUCH	TO A
1. Type of Well: Oil Well	Gas Well Other	8. Well Number
2. Name of Operator		9. OGRID Number
3. Address of Operator		10. Pool name or Wildcat
4. Well Location		
Unit Letter:	feet from the lin	ne andfeet from theline
Section	Township Range	NMPM County
	11. Elevation (Show whether DR, RKB, RT	T, GR, etc.)
	MULTIPLE COMPL CASING OTHER oleted operations. (Clearly state all pertinent of ork). SEE RULE 19.15.7.14 NMAC. For Min	ENCE DRILLING OPNS. P AND A G/CEMENT JOB R:
Spud Date:	Rig Release Date:	
hereby certify that the information	above is true and complete to the best of my	knowledge and belief.
SIGNATURE Sorina L.	FloresTITLE	DATE
Гуре or print name For State Use Only	E-mail address:	PHONE:
APPROVED BY:	TITLE	DATE
Conditions of Approval (if any):	******	

GERONIMO 28 STATE COM 2 - SWD TROUBLESHOOT AND REPAIR SWD

AFE #: 32-21-0209 Routing ID: 541005

API/Surface Loc
3001540876

County
Eddy

Latitude (°)
32° 48' 10" N

Longitude (°)
104° 10' 28" W

Production Area
ARTESIA

Field Name
Artesia

By: Valentino Julien 713-380-0839

NOVEMBER 9, 2021

Directions To Well
Start at Artesia- Loco Hills,
Go west on Lovington Hwy (US-82),
Turn right on Red Lake Rd (CR-208),
Restriction: Avoid Unpaved Roads,
Finish at GERONIMO 28 STATE SWD 2, on the right



Contacts

GB Premium Service – John Shriver – 281 868 9767

Well Information

Casing Strings										
Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Top (ftKB)	Set Depth (ftKB)	Set Depth (TVD) (ftKB)			
Surface	13 3/8	48.00	H-40	ST&C	24.00	487.97	487.93			
Inter 1	9 5/8	40.00	J-55	LTC		4,499.03				
Prod 1	7	26.00	L-80 HC	LTC	24.00	9,528.48				

Casing Components													
Item Des	Type	OD (in)	ID (in)	Jts	Len (ft)	Drift (in)	Wt (lb/ft)	Grade	Top Thread	Mk-up Tq (ft•lb)	Top (ftKB)	Btm (ftKB)	Cum Len (ft)
Cut Joint - CASING CUT JT	Casing	7	6.276	2	81.35	6.151	26.00	L-80 HC	LTC		24.00	105.35	9,504.48
Casing - CASING JOINT(S)	Casing	7	6.276	164	6,641.08	6.151	26.00	L-80 HC	LTC	5,110	105.35	6,746.43	9,423.13
Cement Stage Tool - CEMENT STAGE TOOL	Float Collar	7	6.280	1	2.26				LTC		6,746.43	6,748.69	2,782.05
Casing External Packer - PACKER	Casing	7	6.280	1	24.58				LTC		6,748.69	6,773.27	2,779.79
Casing - CASING JOINT(S)	Casing	7	6.276	67	2,711.84	6.151	26.00	L-80 HC	LTC	5,110	6,773.27	9,485.11	2,755.21
Float Collar - CASING FLOAT COLLAR	Other	7	6.280	1	1.16				LTC		9,485.11	9,486.27	43.37
Landing Joint - CASING LANDING JT	Other	7	6.276	1	40.72	6.151	26.00	L-80 HC	LTC		9,486.27	9,526.99	42.21
Float Shoe - CASING FLOAT SHOE	Other	7	6.280	1	1.49				LTC		9,526.99	9,528.48	1.49

Tubing Strings								
Tubing Description Tubing			te 2016		Set Depth (ftKB) String 7,235.0 7,234			
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)		
Tubing Hanger	1	4 1/2	12.95	SS	0.90	0.5		
Cross Over	1	4 1/2	12.95	J-55	0.72	1.4		
Tubing Pup Joint	1	4 1/2	12.95	J-55	6.16	2.1		
Tubing Pup Joint	1	4 1/2	12.95	J-55	6.15	8.3		
Tubing Pup Joint	1	4 1/2	12.95	J-55	8.20	14.4		
Tubing Joint(s)	231	4 1/2	12.95	J-55	7,187.58	22.6		
Cross Over	1	3 1/2	12.95	N-80	0.85	7,210.2		
Landing Nipple	1	3 1/2	12.95	Nickel Plated	1.10	7,211.0		
On-Off Tool	1	3 1/2	12.95	Nickel	2.00	7,212.1		
Profile Nipple	1	3 1/2	12.95	Nickel	0.01	7,214.1		
Packer	1	6.28	12.95	Nickel	7.85	7,214.2		
Cross Over	1	3 1/2	6.50	N-80	0.45	7,222.0		
Tail Pipe	1	2 7/8	6.50	J-55	12.05	7,222.5		
Pump Out Plug	1	2 7/8	6.50	J-55	0.47	7,234.5		



Important well history

- The well was SI 9/22, for suspected packer/casing leak.
 - 8/15: Pumped acid down tubing for routine stimulation.
 - o 9/22: Well had 700 psi pressure on csg, was bled off and returned to 500 psi within 30 mins. Well was SI.
 - 9/29: RIH w/ plug and set in X-nipple just above pkr. Tbg held 1000 psi for 30 mins.

Objective

There is a either a HIC or leaking pkr. Will scan injection tubing and pending scan may need to replace w/ 2-7/8" IPC tbg. If there is a HIC above the permitted injection interval well will be TA'd and later PA'd.

Procedure

- 1.0 MIRU WOR, rev unit, with iron and related equipment. Test lines to 250 low and 4,500 high. Set working tanks with treated fluid per Tech Management.
- 2.0 Bleed off casing gas pressure through choke manifold into battery line. Attempt to bleed of tubing pressure the same way.
 - 2.1 Pump 50 bbl of brine down casing. Wait 10 min. Ensure well is static.
 - 2.2 If building up pressure calculate kill mud weight needed. Verify w/ engineer and superintendent.
 - 2.3 Last time well required 14.4 kill mud. Have on location ready.
 - 2.3.1 Verify with Tech Management manager weight of fluid being injected to calculate required kill mud weight.
- 3.0 Set BPV in tubing hanger. ND injection tree, NU 5k hydraulic BOPs loaded with 4-1/2" rams and blinds. NU 5k annular BOP. Retrieve BPV. Insert TWC
- 4.0 Test BOP to 250 low and 4,500 psi. Test annular to 250 low and 2,000 psi high. Retrieve TWC
- 5.0 Rig up casing crew.
- 6.0 Release pkr. Wait 10 min. Ensure well is static

Apache

- 7.0 Ensure that GB Premium service tech is on location while SOOH tubing.
- 8.0 Scan OOH with injection string, visually inspect tubing. LD injection string as necessary depending on rig limits of weight in the derrick. Take pictures and collect samples of any deposition or corrosion on the injection string.
- 9.0 RDMO casing crew
- 10.0 Set pipe racks, MI work string 2-3/8", 4.6#, L-80, 8RD EUE
- 11.0 PU 7" RBP / test packer and WS
- 12.0 Set RBP at 7,204'. Test RBP to 500 psi. If good dump sand on top. Test from 7,176 to surface.
 - 12.1 If test is bad well will be TA'd. See contingent procedure below.
 - 12.2 If good proceed with steps below.
- 13.0 Use test pkr to find deepest spot of good csg to surface that is below top of injection interval of 7,176'
- 14.0 Release RBP. POOH w/ WS RBP.
- 15.0 If 4.5" injection string is in good shape re run and same BHA and have GB tech on location. If not, prep location with 2-7/8" 6.5# L-80 8EUE IPC tubing.
- 16.0 RIH w/ injection BHA (B to T) and injection tubing.
 - 16.1 Pump out plug
 - 16.2 1 jt tail pipe 2-7/8
 - 16.3 Nickel coated injection pkr
 - 16.4 Profile nipple 2.31 X
 - 16.5 O/O tool
 - 16.6 Landing nipple
 - 16.7 2-7/8 to surface
- 17.0 Set packer

Apache

- 18.0 Release off O/O. Circulate packer fluid. Engage O/O.
- 19.0 Space out tubing to set 15k in compression on packer. Land tubing head.
- 20.0 Test packer to 1,000# for 15 min.
- 21.0 ND BOP
- 22.0 NU WH.
- 23.0 RDMO WOR

Contingent procedure

- 1.0 POOH w/ WS and RBP and test packer.
- 2.0 RIH w/ CIBP on WS and set at 7,126'. L&T to 500 psi and hold for 10min. LD WS
- 3.0 RU Wireline. RIH w/ cement bailer and place 30' of cement on top of CIBP
- 4.0 RDMO WOR.



Permit Injection Interval

Administrative Order IPI-455 November 1, 2013

Apache Corporation 303 Veterans Airpark Lane, Suite 3000 Midland, Texas 79705-9909 Attn: Fatima Vasquez

RE: <u>Injection Pressure Increase</u>

Disposal Permit: SWD-1378-B

Pool: SWD; Wolfcamp and Cisco formations

Geronimo 28 State SWD Well No. 2 API 30-015-40876 Unit I, Sec 28, T17S, R28E, NMPM, Eddy County, New Mexico

Dear Ms. Vasquez:

Reference is made to your request on behalf of Apache Corporation (OGRID 873) received by the Division on September 9, 2013, to increase the maximum allowed surface tubing pressure on the above named well.

This well was permitted by the Division for water disposal in the Wolfcamp and Cisco formations by Division administrative order SWD-1378-B approved June 17, 2013. That permit allowed disposal through perforations from 7176 feet to 9150 feet at a maximum surface disposal pressure of 1435 psi.

It is our understanding that this well will not take a sufficient volume of fluid at the current pressure limit and a higher pressure limit is needed. It is also understood that an increase will not result in the fracturing of the formation and confining strata.

Apache Corp. Current

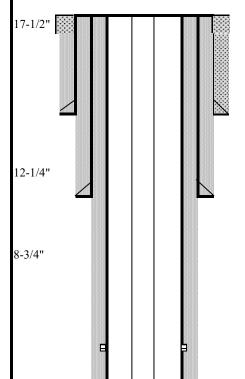
GROUP: Permian North DATE: Nov. 15, 2021

FIELD: Artesia BY: DHK LEASE/UNIT: Geronimo 28 State SWD WELL: #2

COUNTY: Eddy STATE: New Mexico

API NUMBER: 30-015-40876

Spud: 3/28/13 **KB** = 3,709' **Rig Release:** 4/18/13 **GL** = 3,685'



13-3/8" 48# H-40 Set @ 488' CMT W/ 950 SX (CIRC/SURF)

9-5/8" 40# J-55 Set @ 4499' CMT W/ 1570 SX (CIRC/SURF)

7" 26# L-80HC Set @ 9528' CMT W/ 1240 SX; TOC @ 750'

4-1/2" 12.95# EUE 8RD to 7235'

DVT @ 6720'

Packer: 7214-7222'

Perforations: 7434 - 9150'

TD = 9500'

PBTD = 9430'

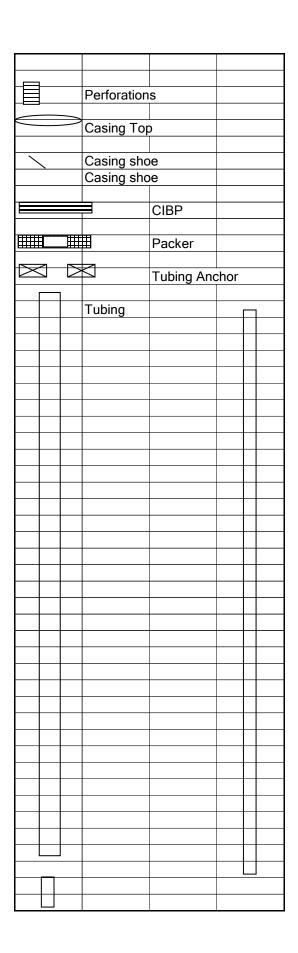
1

Apache Corp. **Proposed GROUP:** Permian North **DATE:** Nov. 15, 2021 DHK FIELD: Artesia BY: LEASE/UNIT: Geronimo 28 State SW WELL: #2 **COUNTY: Eddy STATE: New Mexico** 30-015-40876 API NUMBER: **Spud**: 3/28/13 KB = 3,709'GL = 3,685'Rig Release: 4/18/13 17-1/2" 13-3/8" 48# H-40 Set @ 488' CMT W/ 950 SX (CIRC/SURF) 9-5/8" 40# J-55 Set @ 4499' CMT W/ 1570 SX (CIRC/SURF) 12-1/4" 7" 26# L-80HC Set @ 9528' CMT W/ 1240 SX; TOC @ 750' 8-3/4" 4-1/2" 12.95# EUE 8RD to 7235' DVT @ 6720' Packer: 7204-7212' Perforations: 7434 - 9150'

TD = 9500'PBTD = 9430'

Apache Corp. **Proposed TA GROUP:** Permian North **DATE:** Nov. 15, 2021 FIELD: DHK Artesia BY: LEASE/UNIT: Geronimo 28 State SW WELL: #2 **COUNTY: Eddy STATE: New Mexico** 30-015-40876 API NUMBER: **Spud**: 3/28/13 KB = 3,709'GL = 3,685'Rig Release: 4/18/13 17-1/2" 13-3/8" 48# H-40 Set @ 488' CMT W/ 950 SX (CIRC/SURF) 9-5/8" 40# J-55 Set @ 4499' CMT W/ 1570 SX (CIRC/SURF) 12-1/4" 7" 26# L-80HC Set @ 9528' CMT W/ 1240 SX; TOC @ 750' 8-3/4" DVT @ 6720' CIBP: 7212' Perforations: 7434 - 9150' TD = 9500'**PBTD** = 9430'

Symbols



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 Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 61865

CONDITIONS

Operator:	OGRID:
APACHE CORPORATION	873
303 Veterans Airpark Ln	Action Number:
Midland, TX 79705	61865
	Action Type:
	[C-103] Sub. Workover (C-103R)

CONDITIONS

Created By	Condition	Condition Date
pgoetze	Operator shall provide notice to the OCD Inspection Supervisor 48 hours prior to conducting the MIT as to allow the test to be witnessed by OCD personnel. Operator shall provide a copy of the casing bond log for the production casing string required as a condition of approval in Paragraph 4, Page 1 of Order SWD-1378-B.	2/15/2022