Submit 3 Copies To Appropriate District	State of New Mexico		Form C-103	
Office <u>District I</u>	Energy, Minerals and Natural Resources		June 19, 2008	
1625 N. French Dr., Hobbs, NM 88240 District II			WELL API NO. 30 015 00724	
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DI		5. Indicate Type of Lease	
District III 1000 Rio Brazos Rd., Aztec, NM 87410	District III 1220 South St. Francis Dr.		STATE X FEE	
District IV	Santa Fe, NM 8750	5	6. State Oil & Gas Lease No.	
1220 S. St. Francis Dr., Santa Fe, NM 87505			,	
	CES AND REPORTS ON WELLS		7. Lease Name or Unit Agreement Name	
(DO NOT USE THIS FORM FOR PROPOS DIFFERENT RESERVOIR. USE "APPLIC PROPOSALS.)	ALS TO DRILL OR TO DEEPEN OR PLUG B ATION FOR PERMIT" (FORM C-101) FOR SI	JCH	EMPIRE ABO ÚNIT I	
1. Type of Well: 🖾 Well 🔲 🖂 Gas Well 🚇 Other			8. Well Number 16	
2. Name of Operator APACHE CORPORATION			9. OGRID Number 873	
3. Address of Operator			10. Pool name or Wildcat	
303 VETERANS AIRPARK LN, STE 3000; MIDLAND, TX 79705			EMPIRE ABO	
4. Well Location				
	30 feet from the E	line and <u>990</u>		
Section 02	Township 18S Range		NMPM County EDDY	
	3618' GR	D, KI, GK, EIC.)		
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data				
NOTICE OF IN			SEQUENT REPORT OF:	
PERFORM REMEDIAL WORK		MEDIAL WOR		
TEMPORARILY ABANDON	-	1	LLING OPNS. P AND A	
PULL OR ALTER CASING DOWNHOLE COMMINGLE	MULTIPLE COMPL CA	ASING/CEMENT	10B U	
7 74 /		_		
OTHER: adding ABO perfs		THER:		
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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion				
or recompletion.				
• •				
Apache Corporation plans to preform work on the Empire Abo Unit I #16 as per the attached procedure.				
	& Correctio	'n <sup>†</sup>	RECEIVE	
	# 6011 FC 1.0		JAN 1 3 2012 NMOCD ARTE	
			JAN 1 3 2012	
			NMOCD ADT	
			COUNTY ARTE	
Spud Date: 08/01/1959	Rig Release Date:	1		
00/01/1909	Aig Noteuse Date.			
I hereby certify that the information	bove is true and complete to the best o	f.my.knowlędge	and belief.	
	-V $M$			
SIGNATURE Say Da	wheeld TITLE Sr. Staff R	egulatory Tech	DATE 01/11/2012	
Type or print name Bev Hatfield	E-mail address: be	everly.hatfield@apac	PHONE: 432-818-1906	
For State Use Only	`. `	TX.	/ /	
APPROVED BY TITLE 1) 137 A COLUMN DATE 01/23/2012				
Conditions of Approval (if any):				

- 7. Prepare necessary clean 500 bbl frac tanks with water. Have service company test frac water for quality. Prepare necessary tanks for flowback. Spot tanks, sand support, etc. Prep for frac treatment.
- 8. MIRU Service Company. NU treesaver. NU and test surface lines to 8,500 psi. Max pressure to be 8,000 psi at surface, set pressure alarms and pop-offs accordingly.
- 9. Load hole and establish rate and pressure. Frac the Abo Shale perfs down the 3-1/2" WS w/ 38 klbs 100 mesh and 150 klbs 30/70 resin coated proppant as provided by Service Company. Flush w/ 48 bbls slick water to top perf with 200 gallons acid tailing flush. SD. Shut-in well for min. 2 hours.

STAGE II

Target Rate: 40 BPM

Max Pressure: 8000 psi

- 10. RDMO Frac Company. ND frac valve and tree. NU BOP's. Kill well as necessary. Release PKR and POOH w/ WS.
- 11. MIRU WL. NU lubricator. RIH w/ 5-1/2" CBP and set ~ 5,420'. Test casing to 3,400 psi. POOH w/ WL and setting tool.
- 12. RIH w/3-3/8" csg gun or available equivalent perforator and perforate the Abo Shale from 5,290'-92'; 5,340'-42'; 5,392'-94' w/ w/ 4 JSPF 90 degree phasing (24 holes, 6 net ft). (Charge specs: Connex 0.5" diameter BH). Correlate WELEX radioactivity log date 9/3/1959.
- 13. POOH w/ perforator and RDMO wireline. \*WL on standby to run gauge ring if necessary.
- 14. RIH w/ SN + Baker Hughes R-3 double grip PKR or equivalent on 3-1/2" WS. Spot 200 gal 15% NEFE HCL across perforations. Set PKR just above new perfs ± 5,240°. Test casing to 500 psi.
- 15. Load hole and break down Stage II perfs. Establish rate and pressure. Frac the Abo Shale perfs down the 3-1/2" tubing w/ 38 klbs 100 mesh and 150 klbs 30/70 resin coated proppant as provided by Service Company. Flush w/ 47 bbls slick water to top perf. SD. RDMO Service Company. Shut-in well for minimum 2 hours.

Target Rate: 40 BPM

Max Pressure: 8000 psi

- 16. Open well and flow back well. Recover as much load as possible.
- 17. ND frac valve and tree. NU BOP's. Kill well as necessary. Release PKR and POOH w/ WS.
- 18. RIH w/ 4-3/4" bit, bit sub, and drill out plug at 5,420' and continue to PBTD. Check for sand fill. Circulate hole clean. POOH.
- 19. If zone appears productive, run production equipment as directed by Apache Representative. RTP. If unproductive, prepare well to be PA'd.
- 20. RDMOPU. Turn well to tester and obtain well tests. Have chemical representative test fluids and put well on the appropriate chemical maintenance program.

RMT - 1/11/2012

## Apache Corporation - Empire Abo Unit #I-16

KB=3628' Wellbore Diagram – Proposed Spud: 8/1/59

Date: 11/9/2011

API: 30-015-00724



Surface Location

R. Taylor

990' FNL & 330' FEL, Unit Sec 2, T18S, R27E, Eddy County, NM

Surface Casing

8-5/8" 28# K-55 @ 1102' w/ 300 sx to surface

TOC @ 960'

12/68: Perf @ 3,500' Sgz'd w/ 600 sxs

TAG @ TBD' SN @ TBD'

TBD: Perf Abo @ 5290' \$292'; 5340' -5342'; 5392' 5394' w/ 4 JSPE Frac'd w/ 5890 bbl slickwater, 188k# 100 mesh & 20/40 RC snd

TBD: Perf Abo @ 5444'-5446'; 5480'-5482';5512'-5514 w/-4 JSPF Frac'd w/-5890 bbl slickwater, 188k# 100 mesh & 20/40 RC snd

CIBP set @ 5,580' w/35' cmt

8/03: Perf Abo @ 5444'-46'; 5479'-82'; 5504'-12'; 5589'-91'; 5606'-42'; 5657'-66'; 5698'-5734'; 5772'-86' w/ 2 JSPF Acidize w/ 5700 gal 15% HCL

9/59: Perf Abo @ 5,773'-95'; 5,810'-18'; 5,831'-34'; 5,843'-52';

5,863'-72' w/ 2 JSPF

Acidized w/ 2000 gal 15% LSTNE 9/72: Acidized w/ 1000 gal D.A.D acid

8/03: Fill tagged @ 5845'

Production Casing 5-1/2" 17# K-55 @ 5920' w/ 300 sxs TOC @ 2635'

PBTD = 5845'
TD =5920'

Hole Size

=11"

Hole Size =7-7/8"