Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

-	ACD-H(OMB NO 1004-013
-		OMD NO. 1004-013.
	and the second second	Expires: July 31, 201

5. Lease Serial No. NMNM90161

6.	If Indian.	Allottee	or Tribe	Name

SUBMIT IN TRII	7. If Unit or CA/Agr	7. If Unit or CA/Agreement, Name and/or No.				
1. Type of Well ☐ Gas Well ☑ Oth	8. Well Name and No.	8. Well Name and No. HAWK B-1-13 WBDU-42				
Name of Operator APACHE CORPORATION	PACHE CORPORATION Contact: ISABEL HUDSON E-Mail: Isabel.Hudson@apachecorp.com			9. API Well No. 30-025-20178-00-C1		
3a. Address 303 VETERANS AIRPARK LA MIDLAND, TX 79705	one No. (include area code 32.818.1142	3.1142 MultipleSee Attached				
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description)	HORRS O	11. County or Parish, and State			
Sec 9 T21S R37E NESE 1980 32.491569 N Lat, 103.161587	DFSL 660FEL V	APR 1 8 201	6 LEA COUNTY	, NM		
12. CHECK APPR	COPRIATE BOX(ES) TO INDIC	CATENATURE OF	OTICE, REPORT, OR OTHI	ER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION					
Notice of Intent	☐ Acidize ☐	Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off		
	☐ Alter Casing	Fracture Treat	□ Reclamation	■ Well Integrity		
☐ Subsequent Report	☐ Casing Repair	New Construction	Recomplete	⊠ Other		
☐ Final Abandonment Notice	☐ Change Plans	Plug and Abandon	☐ Temporarily Abandon	Workover Operations		
	☐ Convert to Injection ☐	Plug Back	☐ Water Disposal			
SET PACKER WITHIN 100 OF ACTIVE OR OPEN PERFORATIONS. SEE ATTACHED FOR CONDITIONS OF APPROVAL 14. I hereby certify that the foregoing is true and correct. Electronic Submission #334143 verified by the BLM Well Information System						
Com	For APACHE CORP	ORATION, sent to the	Hobbs			
Name(Printed/Typed) ISABEL HU	JDSON	Title REGUL	Title REGULATORY ANALYST			
Signature (Electronic Se	ubmission)	Date 03/18/20	APPR(OVED		
	THIS SPACE FOR FED	ERAL OR STATE	OFFICE USE			
Annual Dec		Title	APR	2016 Date		
Approved By Conditions of approval, if any, are attached	Approval of this notice does not warran	Title	PID	1000		
ertify that the applicant holds legal or equi which would entitle the applicant to conduc	Office	BUREAU OF LAND				
Fitle 18 U.S.C. Section 1001 and Title 43 U States any false, fictitious or fraudulent st	J.S.C. Section 1212, make it a crime for a tatements or representations as to any materials.	any person knowingly and tter within its jurisdiction.	willfully to make to any department o	agency of the United		
** BLM REVI	SED ** BLM REVISED ** BLI	M REVISED ** BLM	REVISED ** BLM REVISE	D **		

MUS 1000 4/20/2016 Additional data for EC transaction #334143 that would not fit on the form

10. Field and Pool, continued

EUNICE

WBDU 42W Proposed Procedure (API: 30-025-20178)

Clean out well. Shut-off Blinebry perforations. Reperforate and stimulate Drinkard.

March 17, 2016

- Day 1: MIRU. Install BOP. Release 5-1/2" packer and POOH w/ 2-3/8" IPC injection tubing and packer.
- Day 2: PU & RIH w/ 4-3/4" bit and scraper on 2-7/8" work string to +/- 6200'. POOH w/bit and scraper. RIH w/CBP on 2-7/8" work string. Set CBP @ 6,100'. POOH w/ 2-7/8" work string. Dump 8' of sand on top of RBP (approximately 100 lbs 16/30 sand. Confirm volumes).
- Day 3: RIH w/ CICR on 2-7/8" work string. Set CICR & +/- 5760'. MIRU cement crew. Sting into CICR and establish rate into Blinebry perforations. Cement Blinebry perforations with +/- 250 sx of Class C cement (weight 14.8 ppg, yield 1.33 cf/sack). Displace w/ 30 BBL fresh water (confirm volumes). Sting out of CICR and POOH w/ 2-7/8" work string.
- Day 4: Allow 24 hours for cement to set.
- Day 5: RIH w/ bit on 2-7/8" work string. Drill out CICR, cement, and RBP. RU Foam N2 Unit as required. Clean out well bore to PBTD @ +/- 6770'.
- Day 6: Cont. to clean out well to PBTD @ +/- 6770'. Circulate wellbore clean and POOH and LD 2-7/8" work string.
- Day 7: MIRU WL and RIH w/ GR/CNL/CCL, log well from TD to 6,000', POOH

 PU and RIH w/ 3-3/8" TAGs loaded with SDP charges and perforate the Drinkard @ 4 SPF, 90 deg phasing (estimated 70', 280 shots), POOH

 PU and RIH w/ treating packer on 2-3/8" work string
- Day 8: Cont. RIH w/ treating packer on 2-3/8" work string. Set packer @ +/-6450'

 MIRU acid crew. Acidize the Drinkard w/10,000 gals 15% HCl and rock salt in 3 equal stages @ +/- 10 BPM.

 Release packer. Wash out salt. POOH
- Day 9: PU and RIH with 5-1/2" injection packer with 2-3/8" IPC tubing subs, upper and lower profile nipples, and on/off tool on 2-3/8" work string. Set packer @ +/-5701'. Release on/off tool and pressure test casing to 500 psi. POOH and LD 2-3/8" work string

 PROPOSED PERFS 6500 6700'
- Day 10: PU & RIH w/2-3/8" IPC injection tubing and on/off tool. Circulate packer fluid and latch onto packer with on/off tool. ND BOPs and NU WH. Pressure test casing to 500 psi. RDMO.

Day 11: Perform MIT test for NM OCD. Place well on injection

SET INJECTION PACKER

(16500) WITHIN 180' OF TOP

ACTIVE PERFORATIONS.

ACTIVE OCL

Apache Corporation Apache WBDU #42W (Formerly Hawk B-1 #13) WELL DIAGRAM (CURRENT CONFIGURATION) 30-025-20178 WELL NAME: WBDU #42W (Formerly Hawk B-1 #13) API: 9-5/8" CSG. LOCATION: 1980' FSL / 660' FEL, Sec 9, T-21S, COUNTY: Lea Co., NM R-37E CMT. CIRC. SPUD/TD DATE: 4/13/1963 - 5/3/1963 PREPARED BY: **Bret Shapot** COMP. DATE: 6/1/1963 UPDATED: 11/23/1985 TD (ft): 6,780.0 KB Elev. (ft): 3480.0 KB ELEV: 10.0 PBTD (ft):6,770.0 Ground Elev. (ft): 3470.0 SIZE (IN) WEIGHT (LB/FT) CASING/TUBING GRADE **DEPTHS (FT)** 5.5" CSG. Surface Casing 9-5/8 EST. CMT TOP @ (Cmt. w/450x, 36.00 H-40 / J-55 0.00 1,294.00 2300' (TS) circ) 5-1/2" Prod. Casing 17.00 J-55/L-80 0.00 6,780.00 (Cmt. w/700x) TOC @ 2300' (TS) INJECTION TBG STRING LENGTH Depth ITEM DESCRIPTION (FT) (FT) 175 JTS 2-3/8" IPC Tubing 1 Baker Lok-set packer w/on-off tool 2 3 4 5 6 7 Injection Packer 8 Set @ 5703' 9 10 **PERFORATIONS** Form. FT SPF 5822'-24', 32'-34', 37'-38', 46'-48', 51'-53', 58'-59', 72'-74', 80'-84', 5905'-07', 43'-45', 48'-49', 57'-59', 99'-6001', 6012'-13', 24'-26', 41' 2 Blinebry Perfs Blinebry 43' (Active) 5781'-6043' 5781', 87', 99', 5807', 11' 5 2 6690'-93', 6701'-03', 08'-10' 10 2 Drinkard 6582'-84', 90'-92', 96'-98', 6603'-05', 12'-14', 20'-21', 27'-29', 46'-32 2 48', 50'-52', 62'-64', 71'-73' **Drinkard Perfs** (Active) 6582'-6710' PBTD (ft): 6,770.0 TD (ft): 6,780.0

Apache Corporation Apache WBDU #42W (Formerly Hawk B-1 #13) WELL DIAGRAM (PROPOSED CONFIGURATION) WELL NAME: WBDU #42W (Formerly Hawk B-1 #13) API: 30-025-20178 LOCATION: 1980' FSL / 660' FEL, Sec 9, T-21S, COUNTY: Lea Co., NM 9-5/8" CSG. R-37E CMT. CIRC. SPUD/TD DATE: 4/13/1963 - 5/3/1963 PREPARED BY: Bret Shapot COMP. DATE: 6/1/1963 UPDATED: 3/17/2016 KB ELEV: 10.0 TD (ft): 6,780.0 KB Elev. (ft): 3480.0 PBTD (ft):6,770.0 Ground Elev. (ft): 3470.0 SIZE (IN) CASING/TUBING WEIGHT (LB/FT) GRADE DEPTHS (FT) 5.5" CSG. Surface Casing 9-5/8" EST. CMT TOP @ 36.00 H-40 / J-55 0.00 1,294.00 (Cmt. w/450x, 2300' (TS) circ) Prod. Casing 5-1/2" J-55/L-80 0.00 6,780.00 17.00 (Cmt. w/700x) TOC @ 2300' (TS) INJECTION TBG STRING LENGTH Depth ITEM DESCRIPTION (FT) (FT) 2-3/8" 4.7 LB/FT J-55 IPC TBG 5685.0 5685.0 2-3/8" ON/OFF TOOL W/ 1.78 F PROFILE 1.8 5686.8 2 2-3/8" X 4-1/2" NICKLE PLATED ARROW-SET PKR 5693.0 3 6.2 2-3/8" 4.7 LB/FT J-55 IPC TBG 8.0 5701.0 2-3/8" PROFILE NIPPLE 1.50 R 0.9 5701.9 5 2-3/8" 4.7 LB/FT J-55 IPC TBG 5707.9 6.0 6 7 Injection Packer Set @ 5701' 8 9 10 **PERFORATIONS** SPF Form. (Squeezed) 5822'-24', 32'-34', 37'-38', 46'-48', 51'-53', 58'-59', 72'-74', 80'-84', 5905'-07', 43'-45', 48'-49', 57'-59', 99'-6001', 6012'-46 2 **Blinebry Perfs** Blinebry 13', 24'-26', 41'-43' (Squeezed) 5781'-6043' Squeezed) 5781', 87', 99', 5807', 11' 5 2 (Proposed) 6500' - 6700' 70 4 Drinkard 6690'-93', 6701'-03', 08'-10' 10 2 6582'-84', 90'-92', 96'-98', 6603'-05', 12'-14', 20'-21', 27'-29', 46'-32 2 48', 50'-52', 62'-64', 71'-73' **Drinkard Perfs** (Active) 6500' - 6710' PBTD (ft): 6,770.0 TD (ft): 6,780.0

Conditions of Approval

Apache Corporation West Blinebry Drinkard Unit - 42, API 3002520178 T21S-R37E, Sec 09, 1980FSL & 660FEL April 01, 2016

- 1. Operator is required to have the BLM approved NOI procedure with applicable conditions of approval on location for this workover operation.
- Due to being within the Lesser Prairie Chicken habitat, this workover activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15. Exceptions to these restrictions may be granted by BLM's Johnny Chopp <jchopp@blm.gov> 575.234.2227.
- 3. Subject to like approval by the New Mexico Oil Conservation Division.
- 4. Surface disturbance beyond the existing pad shall have prior approval.
- A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
- 6. Functional H₂S monitoring equipment shall be on location.
- 7. 2000 (2M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Blind ram(s) and pipe ram(s) designed to close on all workstring diameters used is required equipment. A manual BOP closure system (hand wheels) shall be available for use regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.
- 8. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
- 9. Provide BLM with an electronic copy cement bond log record of the 5 ½" csg from 6500 or below to top of cement taken with 0psig casing pressure. The CBL may be attached to a <u>pswartz@blm.gov</u> email. The CFO BLM on call engineer may be reached at 575-706-2779.
- 10. The subsequent report is to include workover stimulation injection pressures. Report maximum/minimum injection rate (BPM) and max/min stimulation injection pressures (psig).

- 11. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.
- 12. File intermediate subsequent sundry Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry. Include (dated daily) descriptions of the well work.
- 13. Submit the BLM Form 3160-4 Recompletion Report within 30 days of the date all BLM approved procedures are complete. Include formation tops on the Recompletion Report.

Well with a Packer - Operations

- Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with minimum 200 psig differential between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). Verify all annular casing vent valves are open to the surface during this pressure test. An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
- 3) Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 35 to 75 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) Make arrangements 24 hours before the test for BLM to witness. In Lea County phone 575-393-3612. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number. Note the contact, time, & date in your subsequent report.
- 5) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
- 6) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.

- 7) Compliance with a NMOCD Administrative Order is required.
 - a) Approved injection pressure compliance is required.
 - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
 - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 8) A request for increased wellhead pressures is to be accompanied by a "Step Rate Test:" that is to clearly indicate any requested wellhead pressure is +50psig below frac pressure for the wellbore's disposal formation. PRIOR to a Step Rate Test BLM CFO is requiring a Notice of Intent.
- 9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 10) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of a full annular fluid level at any time.
- 11) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level is necessary to achieve this goal.
- 12) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 13) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office. Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0 psia. Notify the BLM's authorized officer ("Paul R. Swartz" pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 15) Submit a (BLM Form 3160-5 subsequent report (daily reports) via BLM's Well Information System; https://www.blm.gov/wispermits/wis/SP (email pswartz@blm.gov for instructions) describing all wellbore activity and the Mechanical Integrity Test. Include (dated daily) descriptions of the well work, and the setting depths of installed equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer. File intermediate Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.