OCD Hobbs

Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

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.

SUBMIT IN TRIPLICATE – Other instructions on page 2.

HOBBS OCD
AUG 25 2014
RECEIVED

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMLC 90161
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No. WBDU
	8. Well Name and No. West Blinebry Drinkard Unit (WBDU) #040 / 37346
2. Name of Operator Apache Corporation (873)	9. API Well No. 30-025-06433
3a. Address 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 3b. Phone No. *(include area code)* 432/818-1062	10. Field and Pool or Exploratory Area Eunice; B-T-D, North (22900)
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* 660' FSL & 660' FEL UL P Sec 8 T21S R37E	11. County or Parish, State Lea County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER 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
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☑ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Apache would like to convert this well to injection, per the attached procedure. NMOCD Injection Permit attached.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

WFX - 913

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Reesa Fisher — Title Sr. Staff Reg Analyst

Signature Reesa Fisher — Date 04/29/2014

APPROVED
AUG 18 2014
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by — Title — Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

MSB/OCD 8/27/2014

AUG 27 2014

SUBJECT TO LIKE
APPROVAL BY STATE

Proposed Procedure

WBDU 40 (API: 30-025-06433): Deepen Well, Run Liner, and Convert Well to Injection in the Drinkard Formation

April 25, 2014

Day 1: MIRU SR. POOH and LD pump and rods. ND WH and NU BOPs. POOH and LD 2-7/8" production tubing.

PU and RIH w/2-7/8" work string and bit

Day 2: Cont. RIH w/ 2-7/8" work string & bit to PBTD, clean well out as necessary and circulate LCM

Day 3: Cont. to clean well out to PBTD and circulate LCM. Drill well out to +/-6850'

Day 4: Cont. to drill well out to +/-6850'. Circulate wellbore clean and POOH and LD 2-7/8" work string

Day 5: MIRU WL, run GR/CNL/CBL/CCL log from PBTD to surface, POOH. Send logs to Midland

Day 6: RU casing crew and equipment and RIH with 4-1/2" 11.6 lb/ft LTC 8 RD J-55 casing with DV tool (set at +/-5500'), float collar, and float shoe to +/- 6850'. Perform two stage cement job to surface as follows:

a. Pump first stage consisting of 10 bbl fresh water flush, 40 bbl seal bond LCM spacer, and 195 sacks of 50:50 Fly Ash (Pozzolan):Class C cement + additives (weight 14.2 ppg, yield 1.31 cf/sack, volume 45.5 bbls, 50% excess slurry)
b. Drop plug, displace with 106.5 bbl fresh water (confirm volumes) and bump plug. Drop dart, open stage tool
c. Circulate through stage tool with fresh water until setting time for first cement stage has elapsed
d. Pump second cement stage consisting of 20 bbl fresh water flush, lead slurry of 330 sacks 35:65 Fly Ash (Pozzolan):Class C cement + additives (weight 12.5 ppg, yield 2.13 cf/sack, 125.5 bbl), tail slurry of 100 sacks of class C cement + additives (weight 14.8 ppg, yield 1.33 cf/sack, 23.7 bbl)
e. Drop stage tool plug, displace with 85.4 bbl fresh water (confirm volumes)

Day 7: WOC

Day 8: RIH w/ 3-3/4" bit on 2-3/8" work string. Drill out stage tool, float collar and cement to +/- 6735'. Circulate clean. POOH

Day 9: MIRU WL and RIH w/ GR/CBL/CCL, log well from TD to surface, 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 10: Cont. RIH w/ treating packer on 2-3/8" work string. Set packer @ +/-6575'

MIRU acidizers. Acidize the Drinkard w/10,000 gals 15% HCl and rock salt in 3 equal stages @ +/- 8 BPM. Release packer. Wash out salt. POOH

Day 11: PU and RIH with 4-1/2" 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 @ +/-6575'. Release on/off tool and pressure test casing to 500 psi. POOH and LD 2-3/8" work string

Day 12: 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 SR

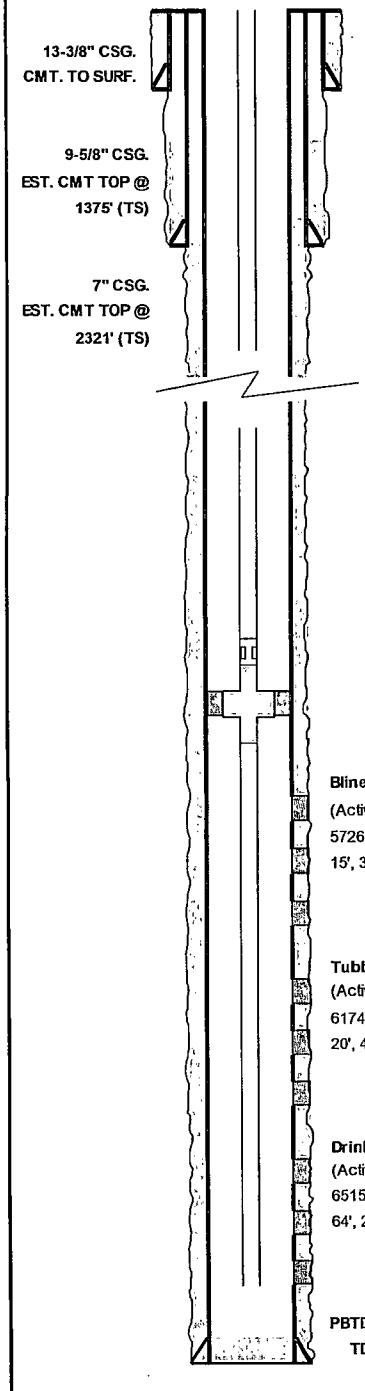
Day 13: Perform MIT test for NM OCD. Place well on injection

Current Wellbore Diagram

Apache Corporation

WBDU #40 (Hawk B-1 #10)

WELL DIAGRAM (CURRENT CONFIGURATION)



WELL NAME:	WBDU #40 (Hawk B-1 #10)	**API:**	30-025-06433
LOCATION:	660' FSL & 660' FEL Unit P, Sec. 8, T-21S, R-37E	**COUNTY:**	Lea Co., NM
SPUD/TD DATE:	11/12/1949 - 12/16/1949	**COMP. DATE:**	12/28/1949
PREPARED BY:	Michael Hunter	**DATE:**	4/24/2014
TD (ft): 6,758.0	**KB Elev. (ft):** 3514.0	**KB to Ground (ft)**	10.0
PBTD (ft): 6,748.0	**Ground Elev. (ft):** 3504.0		

CASING/TUBING	SIZE (IN)	WEIGHT (LB/FT)	GRADE	DEPTHS (FT)	
Surface Casing	13-3/8" (Cmt. w/ 250sx, Circ.)	48.00	H-40	0.00	229.00
Int. Casing	9-5/8" (Cmt. w/ 1100sx, TOC @ 1375')	40.00	J-55	0.00	2,818.00
Prod. Casing	7" (Cmt. w/ 625sx, TOC @ 2321')	23.00	J-55/N-80	0.00	6,753.00
Tubing	2-7/8"	6.50	J-55	0.00	6,706.00

PRODUCTION TBG STRING

ITEM	DESCRIPTION	LENGTH (FT)	Depth (FT)
1	217 JTS 2-7/8" 6.5 LB/FT J-55 TBG		
2	TAC		5622.00
3	SN		6706.00
4			
5			
6			
7			
8			
9			
10			

PRODUCTION ROD STRING

ITEM	DESCRIPTION	LENGTH (FT)	Btm (FT)
1	263 JTS 3/4" C RODS	6,575.00	
2	2 JTS 1-1/2" K-BARS	50.00	
3	BHP: 2" X 1 1/4" X 20' RHBC	20.00	
4			
5			
6			
7			
8			
9			
10			

SURFACE EQUIPMENT

PUMPING UNIT SIZE:	C114-143-64	**MOTOR HP:**	15 HP
PUMPING UNIT MAKE:		**MOTOR MAKE:**	

PERFORATIONS

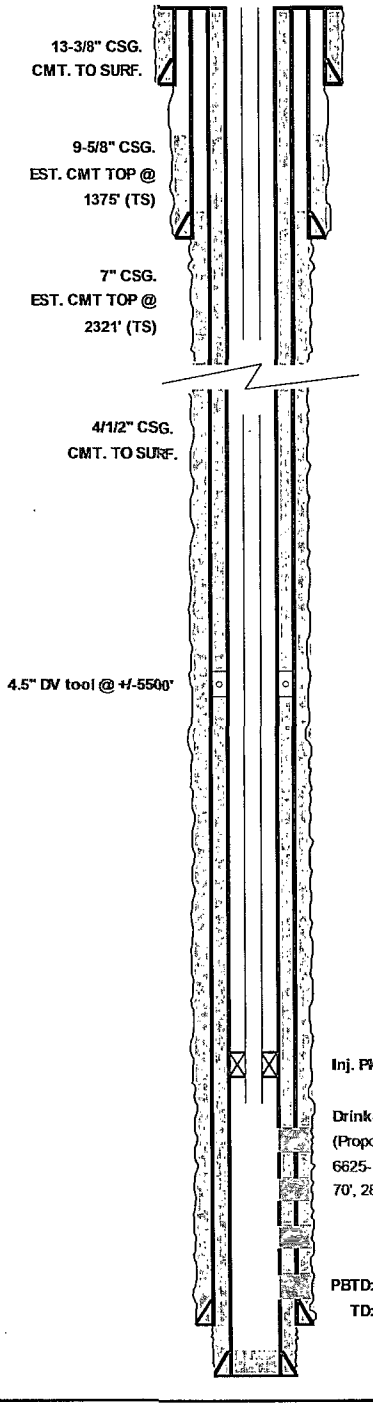
Form.	Intervals	FT	SPF
Blinebry	Active: 5726', 38', 68', 5800', 02', 14', 20', 40', 46', 50', 66', 68', 74', 86', 92'	15	2
Tubb	Active: 6174', 78', 6200', 06', 24', 49', 56', 61', 72', 77', 97', 6300', 12', 18', 20', 22', 31', 44', 46', 50'	20	2
Drinkard	Active: 6515', 21', 30', 34', 49', 58', 73', 75', 86'	9	1
	Active: 6630-42', 47-54', 58-68', 72-90', 6700-08'	55	4

Proposed Wellbore Diagram

Apache Corporation

WBDU #40 (Hawk B-1 #10)

WELL DIAGRAM (~~CURRENT~~ CONFIGURATION)



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SPUD/TD DATE:	11/12/1949 - 12/16/1949	**COMP. DATE:**	12/28/1949
PREPARED BY:	Michael Hunter	**DATE:**	4/21/2014
TD (ft): 6,850.0	**KB Elev. (ft):** 3514.0	**KB to Ground (ft)**	10.0
PBTD (ft): 6,835.0	**Ground Elev. (ft):** 3504.0		

CASING/TUBING	SIZE (IN)	WEIGHT (LB/FT)	GRADE	DEPTHS (FT)	
Surface Casing	13-3/8" (Cmt. w/ 250sx, Circ.)	48.00	H-40	0.00	229.00
Int. Casing	9-5/8" (Cmt. w / 1100sx, TOC @ 1375')	40.00	J-55	0.00	2,818.00
Prod. Casing	7" (Cmt. w / 625sx, TOC @ 2321')	23.00	J-55/N-80	0.00	6,753.00
Liner	4-1/2" (Cmt. to surf)	11.60	J-55	0.00	6,758.00
Injection Tubing	2-3/8"	4.70	J-55 IPC	0.00	6,614.90

INJECTION TBG STRING

ITEM	DESCRIPTION	LENGTH (FT)	Depth (FT)
1	2-3/8" 4.7 LB/FT J-55 IPC TBG	6,592.00	6592.00
2	2-3/8" ON/OFF TOOL W/ 1.78 F PROFILE	1.80	6593.80
3	2-3/8" X 4-1/2" NICKLE PLATED ARROW-SET PKR	6.20	6600.00
4	2-3/8" 4.7 LB/FT J-55 IPC TBG	8.00	6608.00
5	2-3/8" PROFILE NIPPLE 1.50 R	0.90	6608.90
6	2-3/8" 4.7 LB/FT J-55 IPC TBG	6.00	6,614.90
7			
8			
9			
10			

PERFORATIONS

Form.	Intervals	FT	SPF
Blinebry			
Tubb			
Drinkard	Proposed: 6625 - 6760' (estimated)	70	4

Conditions of Approval

Apache Corporation
West Blinebry Drinkard Unit - 40
API 3002506433, T21S-R37E, Sec 08

August 18, 2014

1. 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.
2. This conversion to injection is listed on the Unit Plan of Development and is approved as written with this added list of conditions.
3. Subject to like approval by the New Mexico Oil Conservation Division.
4. Surface disturbance beyond the existing pad shall have prior approval.
5. 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 H_2S 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. **It is required that the 7" x 9 5/8" annulus be cemented from a minimum of 50' below the 9 5/8" shoe to a minimum of 50' above the shoe (circulating cement to surface is encouraged). Verify that cement coverage with a CBL.**
10. **It is required that the 9 5/8" x 13 3/8" annulus be cemented from a minimum of 50' below the 13 3/8" shoe to a minimum of 50' above the shoe. Verify that cement coverage by circulating cement to surface.**
11. **After cementing the 4 ½" liner and before perforating, perform a charted casing integrity test of 750 psig, minimum. Pressure leakoff may require correction for approval. Include a copy of the chart in the subsequent sundry for this workover. Verify all annular casing vents are plumbed to surface and open to the surface during this pressure test.**

12. **Provide BLM with electronic copies (Adobe Acrobat Document) of all cement bond log records of this workover. The CBLs may be attached to a pswartz@blm.gov email. The CFO BLM on call engineer may be reached at 575-706-2779.**
13. 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.
14. File intermediate **subsequent sundry** Form 3160-**5** within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
15. Submit the BLM Form 3160-**4 Recompletion Report** within 30 days of the date all BLM approved procedures are complete.

Access information for **use of Form 3160-5** "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.