FYI

Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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.

5. Lease Serial No.
NMNM 90161

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.
NM120042X

1. Type of Well
☐ Oil Well ☐ Gas Well ☑ Other Injection

8. Well Name and No.
West Blinebry Drinkard Unit (WBDU) #032

2. Name of Operator
Apache Corporation (873)

9. API Well No.
30-025-06437

3a. Address
303 Veterans Airpark Lane, Suite 3000
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)*
1980' FNL & 1980' FWL UL F Sec 9, 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 intends to run a 4-1/2" liner and complete Drinkard pay and RTI this well as a Drinkard only injector, per the attached procedure.

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SUBJECT TO LIKE APPROVAL BY STATE

R-12981-A

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

Title Sr. Staff Reg Tech

Signature Reesa Holland Fisher

Date 05/20/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
AUG 8 2013
/s/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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.

CCD 8-21-2013

(Instructions on page 2)

AUG 21 2013

WBDU 32W Proposed Procedure

June 27, 2013

Deepen the well through all Drinkard pay, run and cement 4-1/2" liner to surface, complete all floodable pay in the Drinkard, and return the well to injection as a Drinkard only injector

Day 1: MIRU. Install BOP. Release 7" pkr and POOH w/ 2-3/8" IPC injection tubing and packer

RIH w/ 6-1/8" washover shoe and washover pipe on 2-7/8" work string

Day 2: Cont. RIH. Cut over and remove Model D packer @ 6470'

Day 3: Cont. cut over and remove Model D packer @ 6470'

Day 4: Cont. cut over and remove Model D packer @ 6470'. POOH

RIH w/ 6-1/8" bit on 2-7/8" work string

Day 5: Cont. RIH. Drill well out from current TD at 6675' to new TD at 6775'

Day 6: Cont. drill well out from current TD at 6675' to new TD at 6775'. Circulate clean. POOH

Day 7: RU WL. RIH w/GR/CNL/CCL/CBL. Log well from TD to surface (perforation intervals to be determined from log interpretation)

Day 8: RU casing crew and equipment. RIH w/ 4-1/2" 11.6# J-55 LTC 8 RD casing w/ centralizers, float equipment, marker joint and stage tool (@ +/-5500') to +/- 6775'.

RU cementers, perform two stage cement job as follows:

Pump first stage consisting of 10 bbl fresh water flush, 40 bbl seal bond LCM spacer, and 180 sacks of 50:50:2 Class C cement + additives (weight 14.2 ppg, yield 1.31 cf/sack, volume 42 bbls, 50% excess slurry)

Drop plug, displace with 105 bbl fresh water and bump plug. Drop dart, open stage tool

Circulate through stage tool with fresh water until setting time for first cement stage has elapsed

Pump second cement stage consisting of 20 bbl fresh water flush, lead slurry of 220 sacks 35:65:4 Class C cement + additives (weight 12.5 ppg, yield 2.13 cf/sack, 83.5 bbl), tail slurry of 100 sacks of class C cement + additives (weight 14.8 ppg, yield 1.33 cf/sack, 23.7 bbl)

Drop stage tool plug, displace with 84 bbl fresh water

Day 9: WOC

Day 10: RIH w/ 3-3/4" bit on 2-3/8" work string. Drill out stage tool, float collar and cement to +/- 6750'. Circulate clean. POOH

Day 11: RU wireline unit. RIH w/CBL/CCL, log well from TD to surface. RIH w/ perforating guns, perforate the Drinkard as per the log evaluation above @ 4 SPF, 90 degree phasing

Day 12: RIH w/4-1/2" treating packer on 2-3/8" work string. Set packer @ +/-6500'. Acidize the Drinkard w/10,000 gals 15% HCl-NE-FE BXDX acid w/scale inhibitor and rock salt in 3 equal stages @ +/- 10BPM.

Release pkr. Wash out salt. POOH

Day 13: RIH w/4-1/2" injection packer, on-off tool and 2-3/8" work string. Set packer @ +/- 6500'. P/T backside to 500 psi. Release on/off tool and POOH LD ws

Day 14: RIH w/2-3/8" IPC injection tubing. Latch on to packer @ +/- 6500'. RO

Day 15: Perform MIT for NMOCD

Allow injection rates to stabilize, run injection profile and temperature survey

At later date, shut well in to perform a fall-off test or static gradient

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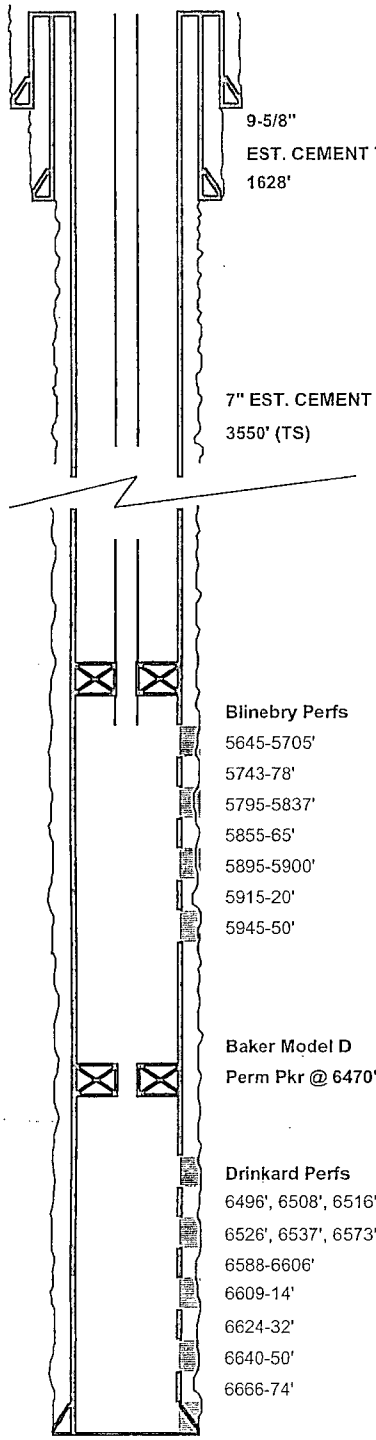
WBDU #32W (HAWK B-1 #1)

WELL DIAGRAM (CURRENT CONFIGURATION)



WELL NAME:	WBDU #32W (HAWK B-1 #1)			**API:**	30-025-06437
LOCATION:	1980'N/1980'W C-SE-NW, Sec. 9, T-21S, R-37E			**COUNTY:**	Lea Co., NM
SPUD/TD DATE:	10-06-47 / 11-14-47			**COMP. DATE:**	11/21/1947
INJ ORDER DATE:	8/11/2008	**INJ. ORDER #:**	R-1298/A	**BPD/PSI:**	490/1120
PREPARED BY:	Michael Hunter			**DATE:**	5/3/2013
TD:	6,675.0	**KB Elev.**	3,502.0	**KB Dist. H**	
PBTD:	6,675.0	**Ground Elev.**	3,492.0	**KB to Ground**	10.00

CASING/TUBING	SIZE (IN)	WEIGHT (LB/FT)	GRADE	DEPTHS (FT)	
Surface Casing	13-3/8" (200sx, circ.)	32.50	H-40	0.00	224.00
	9-5/8" (500sx,	36/40	H-40/J-55	0.00	2,790.00
	TOC @ 1628')				
Prod. Casing	7"	23/26	J-55/N-80	0.00	6,471.00
	7"	10.25	Securaloy Liner	6,471.00	6,674.00
	(500sx, TOC @ 3550')				
Open Hole					
Tubing					

INJECTION TBG STRING

ITEM	DESCRIPTION	LENGTH (FT)	Depth (FT)
1	ON/OFF TOOL		5,589
2	BAKER LOK-SET PACKER		5,591
3	173 JTS 2-3/8" 4.7# (?) J-55 (?) IPC TBG		5,608
4			
5			
6			
7			
8			
9			
10			

PERFORMATIONS

Zone	Intervals	Density
Blinebry	5645-5705', 5743-78', 5795-5837', 5855-65', 5895-5900', 5915-20', 45-50' (Active)	1/4 SPF
Tubb		
Drinkard	6496', 6508', 16', 26', 37', 73', 6588-6606', 6609-14', 24-32', 40-50', 66-74' (Active)	2/4/8 SPF

Tag @: 6,633'
PBTD: 6,675.0
TD: 6,675.0

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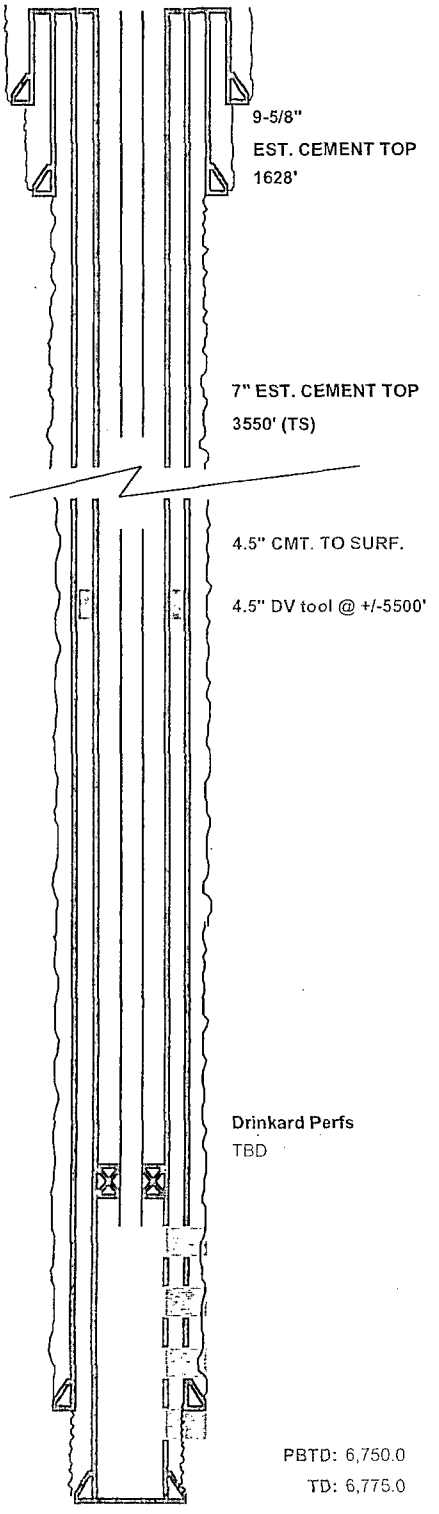
WBDU #32W (HAWK B-1 #1)

WELL DIAGRAM (PROPOSED CONFIGURATION)



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INJ ORDER DATE:	8/11/2008	**INJ. ORDER #:**	R-1298/A	**BPD/PSI:**	490/1120
PREPARED BY:	Michael Hunter			**DATE:**	5/3/2013
TD:	6,775.0	**KB Elev.**	3,502.0	**KB Dist. H**	
PBTD:	6,750.0	**Ground Elev.**	3,492.0	**KB to Ground**	10.00

CASING/TUBING	SIZE (IN)	WEIGHT (LB/FT)	GRADE	DEPTHS (FT)	
Surface Casing	13-3/8" (200sx, circ.)	32.50	H-40	0.00	224.00
	9-5/8" (500sx, TOC @ 1628')	36/40	H-40/J-55	0.00	2,790.00
Prod. Casing	7" (500sx, TOC @ 3550')	23/26	J-55/N-80	0.00	6,471.00
		10.25	Securaloy Liner	6,471.00	6,674.00
	4-1/2"	11.60	J-55	0.00	6,775.00
Open Hole					
Tubing					

INJECTION TBG STRING

ITEM	DESCRIPTION	LENGTH (FT)	Depth (FT)
1	ON/OFF TOOL		+/-6498
2	BAKER LOK-SET PACKER		+/-6500
3	200 JTS 2-3/8" 4.7# J-55 IPC TBG		+/-6520
4			
5			
6			
7			
8			
9			
10			

PERFORATIONS

Zone	Intervals	Density
Blinebry		
Tubb		
Drinkard	TBD	4 SPF

Conditions of Approval

Apache Corporation
West Blinebry Drinkard Unit - 032
API 3002506437, T21S-R37E, Sec 09

August 08, 2013

1. The minimum required fill of cement behind the **4-1/2** inch production liner is:
   a. First stage to DV tool:

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve cement to surface on the next stage.

   b. Second stage above DV tool:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

2. Subject to like approval by the New Mexico Oil Conservation Division.
3. Casing added or replaced requires a prior notice of intent (BLM Form 3160-5) approval of the design.
4. **Provide BLM with an electronic copy (Adobe Acrobat Document) the cement bond log record planned on Day 7 and Day 11 to top of cement. Also provide the injection profile and temperature survey to be ran after rates stabilize. The logs may be attached to a pswartz@blm.gov email.**
5. Surface disturbance beyond the existing pad shall have prior approval.
6. 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.
7. Functional H_2S monitoring equipment shall be on location.
8. 2000 (2M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. A ram system including a blind ram and pipe ram(s) designed to close on all of the work string(s) used is required equipment. Manual BOP closure (hand wheels) equipment shall be available 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.
9. 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.

10. File intermediate **subsequent sundry** Form 3160-**5** within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
11. Submit the BLM Form 3160-**4 Recompletion Report** within 30 days of the date all BLM approved procedures are complete.
12. 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.

Well with a Packer - Operations

1) 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) **Notify BLM 575-393-3612 Lea Co 24 hours before the MIT.** If no answer, leave a voice mail with the API#, workover purpose, and a call back phone number. Note the contact, time, & date in your subsequent report.
3) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with a 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). 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.
4) Document the pressure test on a one hour full rotation calibrated recorder chart registering within 25 to 85 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.
5) Make arrangements 24 hours before the test for BLM to witness. 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.
6) 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.
7) 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.

8) **Submit the original subsequent sundry with three copies to BLM Carlsbad.** HOBBS OCD
9) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization. AUG 1 0 2013
   a) Approved injection pressure compliance is required.
   b) If injection pressure exceeds the approved pressure you are required to reduce that RECEIVED 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.
10) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
11) 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.
12) 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.
13) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
14) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
15) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0psia. 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.
16) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of installed equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer. The setting depths and descriptions of each are to be included in the subsequent sundry. List daily descriptions of any previously unreported wellbore workover(s) and reason(s) the well annular fluid was replaced.

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.