Form 3160-5
(August 2007)

OCD-HOBBS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

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 reverse side.

5. Lease Serial No.
NMNM97153

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
VACA DRAW 9418 01

2. Name of Operator
BTA OIL PRODUCERS
Contact: PAM INSKEEP
E-Mail: pinskeep@btaoil.com

9. API Well No.
30-025-33639-00-S2

3a. Address
104 SOUTH PECOS STREET
MIDLAND, TX 79701

3b. Phone No. (include area code)
Ph: 432-682-3753 HOBBSOCD
Fx: 432-683-0325

10. Field and Pool, or Exploratory
~~JOHNSON RANCH~~
~~WILDCAT~~ SWD; Bell Canyon - Cherry Canyon (96802)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 10 T25S R33E NESW 1980FSL 1980FWL

FEB 12 2015
RECEIVED

11. County or Parish, and State
LEA COUNTY, NM

12. CHECK 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
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☒ 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

BTA Oil Producers LLC respectfully requests approval to convert this well to injection.

Proposed procedure is attached.

Economic and reserves evaluations are attached.

Authorization to Inject has been granted by the OCD - Order R-13922.

SUBJECT TO LIKE APPROVAL BY STATE

WITNESS
PLUG BACK

SEE ATTACHED FOR CONDITIONS OF APPROVAL

CONDITION OF APPROVAL: Notify OCD DISTRICT OFFICE 24 HOURS prior to STARTING THE WORKOVER.

CONDITION OF APPROVAL: *Operator shall give the OCD District Office 24 hour notice before running the MIT test and chart.*

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #278112 verified by the BLM Well Information System
For BTA OIL PRODUCERS, sent to the Hobbs
Committed to AFMSS for processing by LINDA JIMENEZ on 11/20/2014 (15LJ0363SE)

Name *(Printed/Typed)* PAM INSKEEP — Title REGULATORY ADMINISTRATOR

Signature (Electronic Submission) — Date 11/11/2014

APPROVED
FEB 2 2015
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.

**** BLM REVISED ** BLM REVISED ** BLM RE**

E-PERMITTING - - New Well_____
Comp_____ P&A_____ TA_____
CSNG_____ Loc Chng_____
ReComp_____ Add New Well_____
Cancl Well_____ Create Pool_____

FEB 18 2015

BTA Oil Producers
9418 Vaca Draw #1
Program to Convert to SWD
Johnson Ranch Field
Lea County, New Mexico

Well Data: TD 14,160'
PBTD 14,093'

Elevations: 3411' KB
3394' GL
17' Diff

Casing: 13-3/8" 54.5# J-55 @ 715' w/ 580 Sx (Cmt Circ)
8-5/8" 32# J-55 @ 5000' w/ 1925 Sx (Cmt Circ)
5-1/2" 17# P-110 & S95 @ 12,575' w/ 1850 Sx
TOC @ 6980' by CBL
(Originally thought to be @ 3440' by temp survey)
2-7/8" 6.5# P-110 **BTS-8 Thread** @ 14,159' w/ 300 SX
TOC @ 12,250' by temp survey

Lesser Praire Chicken Restrictions are in place March 1-June 15. Work hours are 9:00 AM to 3:00 PM.

Pertinent Well History: Well originally produced through 5-1/2" casing in the Bone Springs formation. In 1999, well was deepened and completed in the Wolfcamp formation with 2-7/8" P-110 Casing cemented in place. **In April 2014 a freepoint was run on the 2-7/8" tbg/csg, the pipe was 100% free down to 8340'.**

Capacities:

2-7/8" 6.5# Tbg/Casing	0.00579 bbl/ft
5-1/2" 17# Casing	0.0232 bbl/ft
Between 2-7/8" and 5-1/2"	0.0152 bbl/ft

Procedure:

1. Notify BLM (575-393-3612) of job to convert well to disposal. You will need the well API number: 30-025-33639. Leave a message if no one answers.
2. Bullhead 10 ppg brine down 2-7/8" to kill well.
3. MIRU WL unit. RIH w/ 2.3" gauge ring to 13,450'.
4. RIH and set CIBP in 2-7/8" casing @ 13,420'.
5. Pressure test plug to 500 psi for 10 min.
6. Run CBL from 13,420' to 8300' with no pressure. Email CBL to TraceW@BTAoil.com and PSwartz@BLM.gov. The CFO BLM on call engineer may be reached at 575-706-2779.
7. MIRU 1-3/4" CT unit.
8. RIH w/ wash nozzle and tag CIBP @ 13,420'. Lay in cement plug (16.4 ppg, 1.06 cuft/sx, 4.3 gal/sx) from CIBP to TOC.
9. RDMO CT unit.

I. **If TOC on 2-7/8" tbg/csg is higher than 9150'.**
   a. RIH w/ WL and cut 2-7/8" tbg/csg @ 8350'. Circulate clean, POH and LD 2-7/8".
   b. PU 2 jts (at least 60') of 2-1/16" tbg w/ mule shoe and cross over to 2-7/8". RIH, stab into cut tbg/csg. Tag up on cross over, then pull up 4'. Pump balanced plug of Class H cement (16.4 ppg,

1.06 cuft/sx, 4.3 gal/sx, min 25 sx) across stub from 8400' to 8150'. Pull up out of plug, reverse out, and POH. ***Notify BLM prior to pumping cement plug so that they can witness if desired.**

II. **If TOC on 2-7/8" tbg/csg is lower than 9150'**

a. RIH w/ WL and cut 2-7/8" tbg/csg @ 8350'. Circulate clean, POH and LD 2-7/8"
b. PU shoe and 5 jts of wash pipe and wash over 2-7/8" tbg/csg to 9230'
c. Cut 2-7/8" tbg/csg @ 9200'. POH and LD 2-7/8".
d. PU 2 jts (at least 60') of 2-1/16" tbg w/ mule shoe and cross over to 2-7/8". RIH, stab into cut tbg/csg. Tag up on cross over, then pull up 4'. Pump balanced plug of Class H cement (16.4 ppg, 1.06 cuft/sx, 4.3 gal/sx, min 25 sx) across stub from 9250' to 9000'. Pull up out of plug, reverse out, and POH. ***Notify BLM prior to pumping cement plug so that they can witness if desired.**

10. Wait on cement for at least 8 hrs.
11. Pressure test 5-1/2" casing and cement plug to 1000 psi for 30 min on a chart.
12. RIH w/ 4.6" gauge ring on WL and tag cement plug.
13. Run CBL from 7500' to surface.
14. **Verify cement top with engineer before proceeding.**
15. RIH and perforate cement circulation squeeze holes in 5-1/2" casing (12 holes, 0.42 EHD, 6 SPF) at 6940' or above TOC on 5-1/2" casing.
16. RDMO WL Unit.
17. PU and RIH w/ packer for 5-1/2" casing. Set packer at 6900'.
18. Attempt to establish circulation down tubing taking returns on 5-1/2" x 8-5/8" annulus. Report to engineer.
19. POH and LD packer. PU and RIH w/ Cast Iron Cement Retainer. Set CICR 50' above squeeze holes
20. Sting into CICR and establish circulation. Pump 1000 sks Class C cement (verify cement design with engineer) taking returns through 5-1/2" x 8-5/8" casing head. Sting out of retainer and reverse circulate out 1.5x tubing volume.
21. POH and LD stinger.
22. Wait on cement for a minimum of 8 hours.
23. MIRU WL unit. Pull GR/CCL/CBL from CICR to Surface. Correlate to SLB open hole log dated 12/22/96. Email CBL to TraceW@BTAoil.com and PSwartz@BLM.gov. The CFO BLM on call engineer may be reached at 575-706-2779. **TOC must be above 4500' to proceed.**
24. Pressure test casing to 1000 psi for one hour on chart. Send chart to TraceW@BTAoil.com and PSwartz@BLM.gov.
25. RIH w/ 3-1/8" 2 JSPF perforating guns and tag CICR. Report WL depth on daily report. Pull up and perforate (Delaware) 5062'-6750' as per table below:

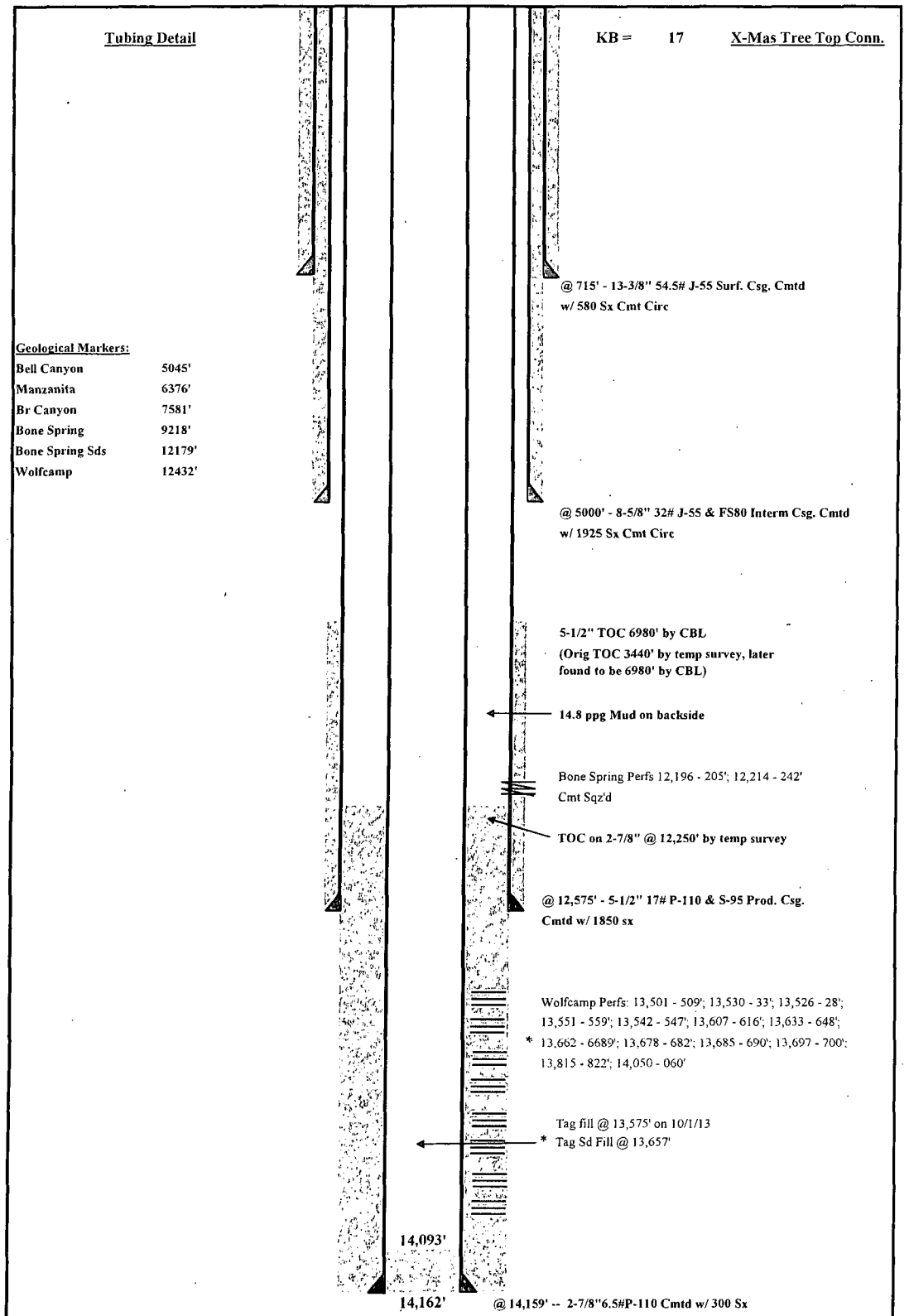
Delware Injection Perfs

DEPTH			SPF	HOLES	GUN FTG
6,702'	-	6,750'	2	96	48
6,610'	-	6,674'	2	128	64
6,582'	-	6,600'	2	36	18
6,546'	-	6,572'	2	52	26
6,496'	-	6,522'	2	52	26
6,454'	-	6,470'	2	32	16
6,382'	-	6,430'	2	96	48
6,282'	-	6,322'	2	80	40
6,216'	-	6,264'	2	96	48
6,146'	-	6,166'	2	40	20
6,074'	-	6,122'	2	96	48
5,940'	-	6,030'	2	180	90
5,864'	-	5,888'	2	48	24
5,824'	-	5,848'	2	48	24
5,750'	-	5,770'	2	40	20
5,672'	-	5,698'	2	52	26
5,632'	-	5,654'	2	44	22
5,584'	-	5,610'	2	52	26
5,486'	-	5,540'	2	108	54
5,400'	-	5,420'	2	40	20
5,342'	-	5,382'	2	80	40
5,235'	-	5,260'	2	50	25
5,118'	-	5,170'	2	104	52
5,062'	-	5,078'	2	32	16
h = 1688'				1682	841

26. Establish injection rate and pressure by performing injection step rate test with a kill truck.
27. Prepare to pump large acid job if needed.
28. PU and RIH w/ pump off plug, inline check valve, nickel coated OD / plastic coated ID Arrowset 1X packer for 5-1/2" 17# casing; T2 on/off tool w/ 2.25F SS Profile; and new 2-7/8" J-55 plastic coated ID tubing. Set packer 15' above top perf.
29. Get off of packer and circulate around 120 bbls inhibited packer fluid. Pressure test backside to 500 psi for 30 min recording results on chart.
30. ND BOP, NU WH. RDMO pulling unit.
31. Pressure up on tubing and blow pump off plug.
32. Establish injection into Delware perfs. Report injection rate/pressure to office.
33. Schedule and perform Mechanical Integrity Test with Maxey Brown at the BLM. Send in chart to office.
34. After MIT has been approved, put well on injection.

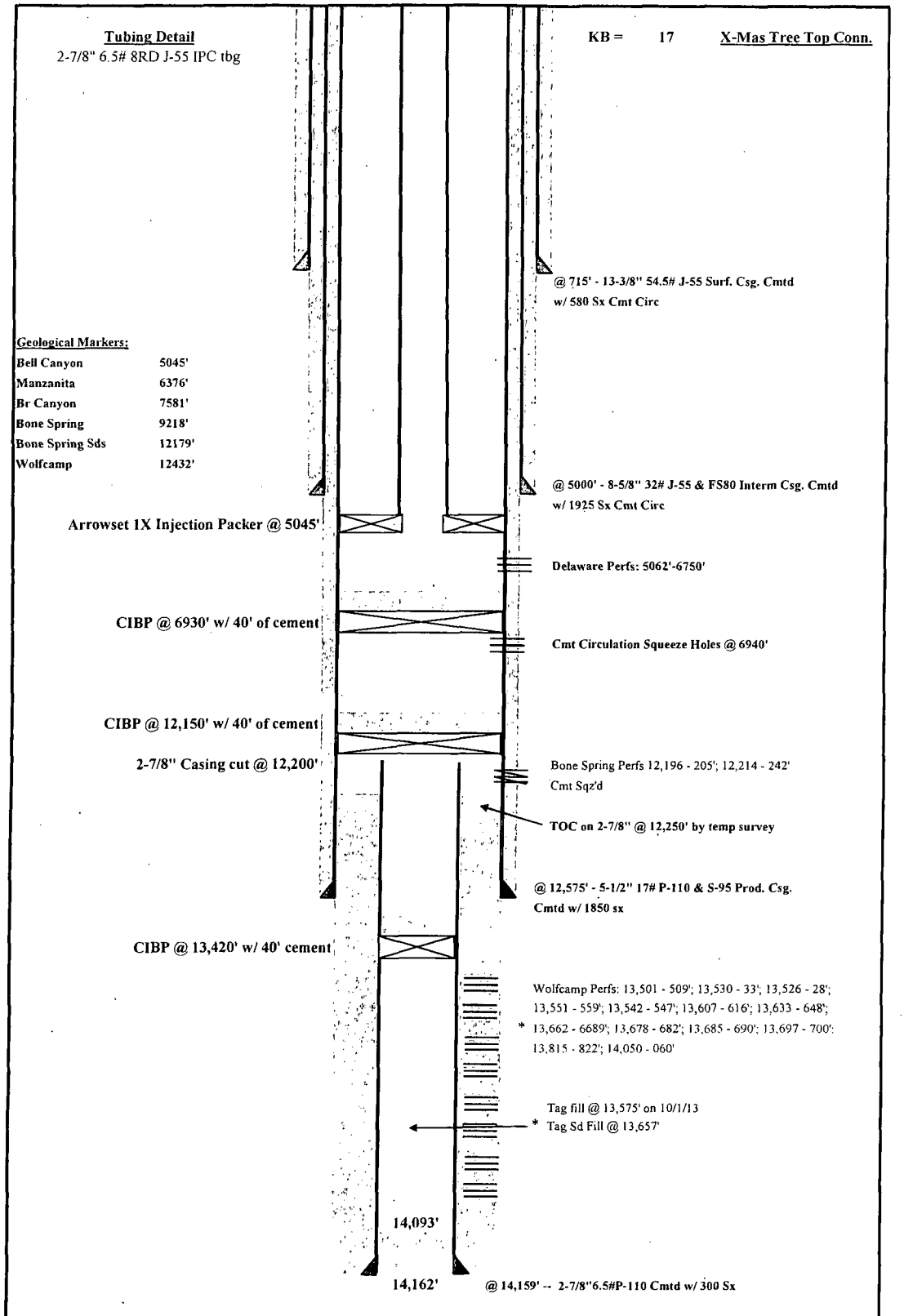
RTW
2/2/15

Vaca Draw #1 - Current WBD



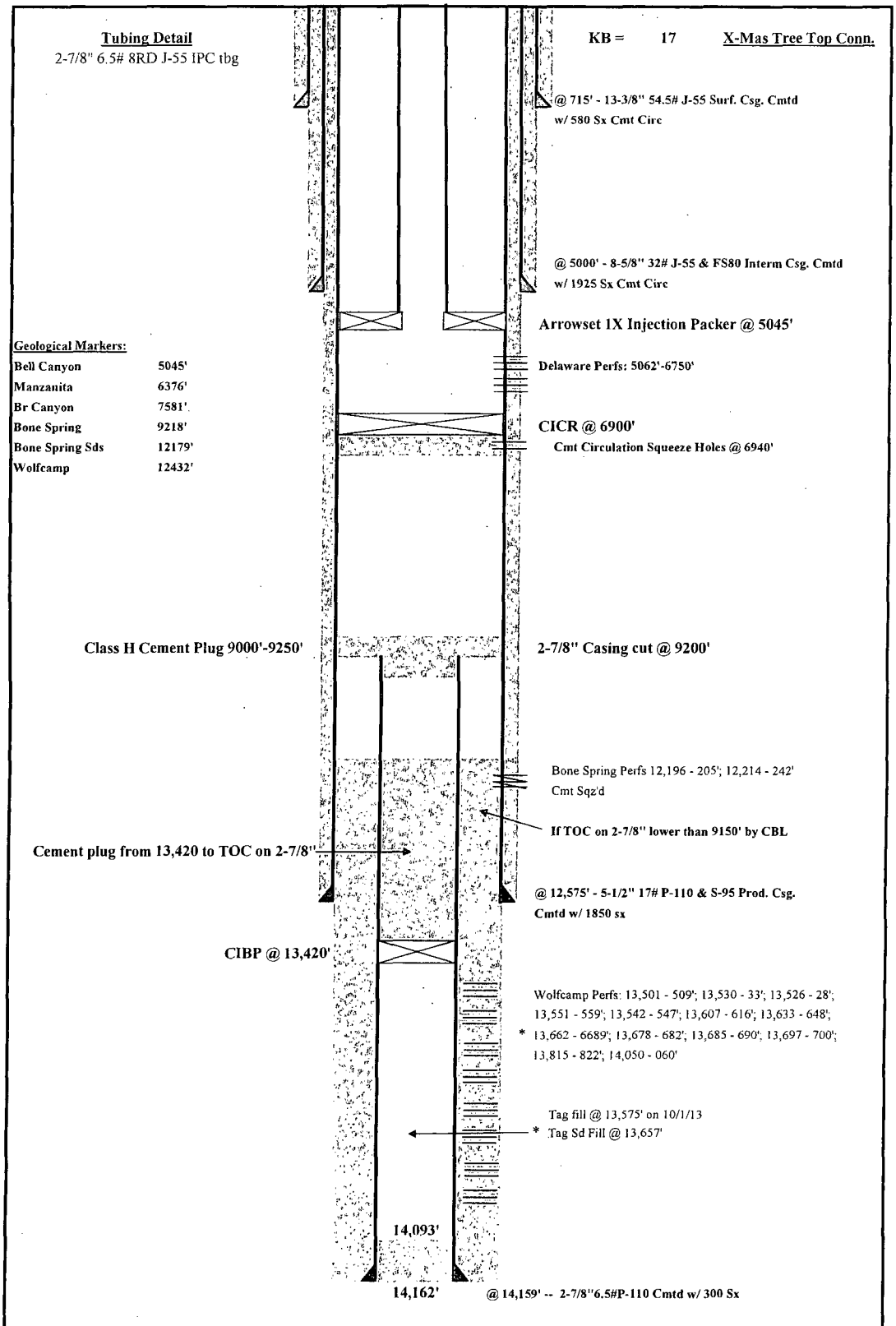
Revised					
RTW	2/20/2014	Gas Well		Drawn	TJW
		LEASE:	9418 JV-P Vaca Draw #1		3/29/2007
		FIELD:	Johnson Ranch		
		LOCATION:	1980' FSL 1980' FWL Sec. 10 T25S R33E	Approved	
		COUNTY:	Lea STATE: New Mexico		
		PRODUCING FORMATION:	Wolfcamp	Date	
		BTA Oil Producers			

Vaca Draw #1 - Proposed WBD



Revised		Gas Well		Drawn	TJW
RTW	2/20/2014	LEASE:	9418 JV-P Vaca Draw #1		3/29/2007
		FIELD:	Johnson Ranch		
		LOCATION:	1980' FSL 1980' FWL Sec. 10 T25S R33E	Approved	
		COUNTY:	Lea STATE: New Mexico		
		PRODUCING FORMATION:	Wolfcamp	Date	
		BTA	BTA Oil Producers		

Vaca Draw #1 (API: 30-025-33639) - Proposed WBD ***If 2-7/8" TOC below 9150'



Revised		Gas Well		Drawn	TJW
RTW	9/11/2014	LEASE:	9418 JV-P Vaca Draw #1		3/29/2007
		FIELD:	Johnson Ranch		
		LOCATION:	1980' FSL 1980' FWL Sec. 10 T25S R33E	Approved	
		COUNTY:	Lea STATE: New Mexico		
		PRODUCING FORMATION:	Wolfcamp	Date	
		BTA Oil Producers			

Conditions of Approval

BTA Oil Producers LLC
9418 JV-P Vaca Draw - 01
API 3002533639, T25S-R33E, Sec 10
February 2, 2015

1. A new "Well Location and Acreage Dedication Plat" (NMOCD Form C-102) is required with the notice of intent package when opening another pay zone.
2. Since the well is to be used for commercial water disposal a BLM Right of Way Agreement is to be secured before its use.
3. 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 or Bob Ballard <bballard@blm.gov> 575.234.5973.
4. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
5. **Notify BLM 575-393-3612 BLM-Hobbs Field Office as work begins. The procedures are to be BLM witnessed. If there is no response, leave a voice mail with the API#, workover purpose, and a call back phone number.**
6. **Provide BLM with electronic copies of a (Adobe Acrobat Document) cement bond log ran with 0psig in the 2 7/8" tbg/csg from 13400. Forward the CBL as an attachment to pswartz@blm.gov.**
7. **BLM is to verify adequate cement bond coverage from 12675 to TOC 50ft or more above the top of the Bone Spring formation in the 2 7/8" x 5 ½" annulus. Corrective procedures will be required if that condition is not present.**
8. **Spot a Class "H" cement plug(s) from the CIBP to be set in the 2 7/8" from 13420 to TOC. Insure there is cement coverage from 13420 to 13320, 12675 to 12300, and 9320-9100. Tag the plug(s).**
9. Minimum requirement for mud placed between plugs is 25 sacks of salt water gel per 100 barrels in 9 lb/gal brine.
10. **After the 2 7/8" is cut at 8350, spot a class "H" cmt plug (25sx minimum) from over 50' inside the 2 7/8" to 50ft or more above the top of the cut. The CIBP of steps 10 and 11 will not be necessary after this required cmt plug is set.**
11. **Provide BLM with electronic copies of (Adobe Acrobat Document) of the 5 ½" cement bond log taken at 0psig from the 2 7/8" top. The CBLs may be attached to a pswartz@blm.gov email.**
12. **Pressure test (500psig min) the 5 ½" casing prior to perforating for the CICR procedure.**
13. **The proposed perforations mandate the requirement of cement from the present TOC to 4500 or above in the 5 ½" x 8 5/8" annulus.**

14. **Tag the PBTD above the CICR and pressure test (1000psig at surface) the 5 ½" casing.** Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range.
15. **Verify bond coverage after the CICR cementing procedure with a CBL taken at 0psig. The CBL may be attached to a pswartz@blm.gov email.**
16. Surface disturbance beyond the existing pad must have prior approval.
17. 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.
18. Functional H_2S monitoring equipment shall be on location.
19. 5000 (5M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels) equipment shall be installed 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.
20. 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.
21. The BLM PET witness is to run tbg tally and agree to cement placement. Sample each plug for cement curing time and tag and/or pressure test (minimum **WOC - 8 hours**) as requested by BLM PET witness.
22. Set cement plugs to cover a minimum of 100ft plus 10ft for every 1,000ft from the bottom of the plug, rounding the number of necessary sacks up to the nearest 5 sacks. Never use less than 25sx. Examples: A cement plug set at 8000 in 7" casing would require a min of 35sx. A 25sx plug in 5 ½" casing should cover 250ft, which may exceed 100ft plus 10ft per 1000ft.
23. Class H > 7500ft & C < 7500ft) cement plugs(s) will be necessary. For any plug that requires a tag or pressure test a minimum WOC time of 4 hours(C) & 8 hours(H) is recommended. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 ft^3/sx, 6.3gal/sx water and "H" to be mixed 16.4#/gal, 1.06ft^3/sx, 4.3gal/sx water.
24. The operator shall test for oil and gas production from the injection zone. Demonstrate that paying quantities of hydrocarbons are not produced when the well has a pumped off fluid level. Open hole logs may support the evaluation. BLM agreement is to be obtained prior completion as a disposal well.
25. Approval is granted for disposal of water produced from the lease, communitization, or unit agreement of this well only. Disposal fluid from another operator, lease, communitization, or

unit agreement require BLM surface right-of-way agreement **approvals** and if applicable, authorization from the surface owner.

26. Disposal of water from another operator requires that the well be designated as a commercial well and BLM surface right-of-way agreement **approvals.**

27. If the well is to receive off-lease water or commercial disposal, the operator shall provide proof of surface right-of-way approval prior to injection.

28. File intermediate **subsequent sundry** Form 3160-**5** within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.

29. Submit the BLM Form 3160-**4 Recompletion Report** within 30 days of the date all BLM approved procedures are complete.

Operations for a Well with an Inj Packer

1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established.
2) 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). **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 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.
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.
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.
7) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
8) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.

9) 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 pressure 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.

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.