New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

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.*

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NM 015677
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No.
	8. Well Name and No. Hahn Federal #1
2. Name of Operator Cross Borders Resources, Inc.	9. API Well No. 30-005-20466
3a. Address 2515 Mckinney Ave, Suite 900, Dallas, Tx 75201 3b. Phone No. *(include area code)* 214-871-0400	10. Field and Pool or Exploratory Area
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* Sec 27, T-7S, R-31E 660' FSL and 1980' FWL	11. County or Parish, State Chaves 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 Well Work over
	☐ 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.)

Please see attached procedure.

HOBBS OCD

APR 25 2013

RECEIVED

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

Title Agent

Signature

Date 04/12/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /S/ DAVID R. GLASS

Title PETROLEUM ENGINEER

Date APR 17 2013

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 ROSWELL FIELD 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)

MAY 23 2013

APPROVED FOR 3 MONTH PERIOD
ENDING JUL 17 2013

clm

Red Mountain Resources, LLC

Hahn Federal #1
Sec 27, 7-S, 31-E
660'FSL & 1980'FWL
Chaves Co, New Mexico
Tom Tom Field
API No: 30-005-20466

Workover procedure for well remediation and recompletion

Casing

Surf	8.625"	J-55	24#	385'	cmt circ to surf
Prod	4.500"	K-55	10.5#	4080'	TOC @ 2225' (calc)
Tbg	2.375"	J-55	4.7#	?'	

Logs

Neutron Porosity Log: 3/15/75
Dual Laterolog: 3/15/75

PERFORATIONS

San Andres Interval – (3,919' – 4,034') 1-2 SPF

(3,919' – 3,971') – 52' (15 Holes) *Existing Perfs P-2
(4,028' – 4,034') – 6' (28 Holes) *Existing Perfs P -3 lower

PROPOSED PERFORATIONS

San Andres P3 Upper – (3,974' – 3,993') 4SPF

(3,974' - 3,974') - 1' (4 Holes)
(3,982' – 3,982) - 1' (4 Holes)
(3,988' – 3,988') –1' (4 Holes)
(3,991' – 3,993') –3' (12 Holes)

Objective

Research and evaluate opportunities for increased production and optimization potential for well

Discussion

A geological review of the Hahn Federal #1 was performed by Earl Sebring and reviewed by Tommy Folsom. The subject well is offset to the Hahn #7, #4, #2, and #5. The Hahn Federal #1 porosity logs are similar to the corresponding intervals in these offset wells. The porosity log shows the interval to be a tighter formation than similar completed offset wells. A core sample taken at the time of drilling shows a 20% oil saturation in that interval. The potential for producing pay was confirmed by correlation of the neutron porosity logs of the subject and offset wells. Recommendations for this well are to perform a

cleanup of the existing perforations and wellbore, then perforate the proposed P3 upper zones, acidize new and existing perforations and put well on production.

Pre Work-over

- Shoot Fluid level and run Dyno on well if available
- If well is pumping, hot water casing w/ 75 bbls to clean up paraffin and salt
- An oil sample should be collected and sent to stimulation company to be analyzed to insure emulsion is not created during stimulation.
- Notify BLM 24 hours before starting work over

Remediation and Optimization Procedure

1. MIRU PU
2. POH w/ rods and pump
   Note:
   - While POH, look for rod pitting, wear, and fatigue, If scale or paraffin are observed take samples to be analyzed, lay down any damaged equipment or any equipment not deemed fit for service
   - With pump on surface make note of any material in pump and report any general observations about the pump. Send pump into shop for a complete teardown and report
3. ND wellhead, NU 4.5" x 2 3/8" BOP (3,000 psi)
4. Release TAC, RIH and tag for fill, report tag depth
5. POH and tally out
   Note:
   - While POH, look for pitting and wear, If scale or paraffin are observed take samples to be analyzed, lay down any damaged equipment or any equipment not deemed fit for service
   - With tbg on surface make note of any material in or on the tbg and report any general observations about the tbg
   - RIH w/ bailer and clean out to PBTD if necessary
6. RIH w/ 3 ¾" bit and scraper
7. RIH to TD, testing in hole to 4000 psi above slips
8. POH and lay down tools
9. TIH w/ AS1 packer set packer @ 3,887' ±
10. Load csg w/ 40 bbls produced water and pressure test annulus to 300 psi
    Note:
    - If test fails, POH w/ tools , RIH w/ pkr and RBP to isolate breakdown in csg, a squeeze procedure will be prepared
    - If test passes, continue on w/ procedure
11. Release pkr, POH lay down tools

12. RU wireline and junk basket and gauge ring, run CBL log from TD 100' above cement top. Look for perforated intervals and cmt top.
13. RIH w/ perforating guns at 4 SPF 90 degree phasing, correct on depth and perforate as follows:
    San Andres P3 Upper – (3,974' – 3,993') 4SPF

    (3,974' - 3,974') -1' (4 Holes)
    (3,982' – 3,982') - 1' (4 Holes)
    (3,988' – 3,988') –1' (4 Holes)
    (3,991' – 3,993') – 3' (12 Holes)

14. TIH w/ AS1 packer and RBP, Set RBP @ 4,050 ± Pull up hole and set pkr @ 4,010'±
15. Acid treat down tbg into perfs at 4,028' – 4,034' with 3000 gals 15% HCL NEFE acid treat at 1 to 3 BPM 3000 psi max pressure, flush with produced water with 32 Bbls double tbg capacity, record 5, 10,15 minute shut in pressure.
16. Release pkr, retrieve RBP, PUH, set RBP @ 4,005'±, release off RBP, set packer and test RBP to 1000 psi pull up hole and set pkr @ 3,972.5'
17. Acid treat down tbg into perfs at 3,974' – 3,993' with 1000 gals 15% HCL NEFE, acid treat at 1 to 3 BPM 3000 psi max pressure, (max pressure may change depending on P3 lower leak off) flush with produced water 32 Bbls double tbg capacity.
18. Release pkr, PUH and set pkr @ 3,904'±
19. Acid treat down tbg into perfs at 3,919' – 3,971' and 3,974' to 3,993' with 5000 gals 15% HCL NEFE, acid treat at 1 to 4 BPM with max pressure at 3000 psi. Flush with produced water with 32 Bbls double tbg capacity.
20. Swab test for potential; insure no live acid is being produced.
21. Release pkr, POH and lay down tools
22. RIH w/ 2 3/8" production tbg and BHA
23. Run tbg as follows

    - Slotted tapped BP MA
    - SN
    - 6 jts 2 3/8 J-55 tbg
    - TAC
    - Remaining 2 3/8" tbg required to set EOT at 4,040'

24. Set TAC w/ 15k tension @ 3,854' ±
25. Set SN at 4,009' ±
26. ND BOP and NU well head
27. RIH w/ rods and pmp
28. Run rods and pmp as follows
    - PR
    - 1 - ¾" rod
    - Required ¾"space out rods
    - 152 - ¾" Rods
    - 6 - 7/8" Rods
    - 2" pump (pump will be sized from swab test)
29. Space out rods and pump, check for pump action
30. Hang on horses head.

31. Put well back on production and report production daily
32. RD PU, clean up location

Post Work-over

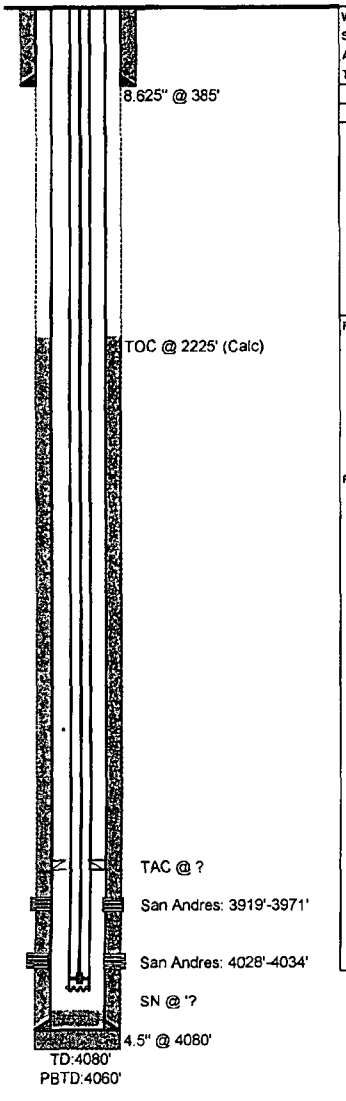
- Track production daily
- Check and report fluid level on weekly basis following work over until fluid level is pumped off then continue monitoring on schedule.
- Follow up on production at 1 month, 3 month, and 6 month, make applicable changes to ensure well is producing at optimal efficiency

Procedure Written By: Casey Satterfield

Approved By: Tommy W. Folsom

Cross Border Resources, Inc.

Well data as of: 4/12/2013



WELL NAME:	HAHN FEDERAL 1	FIELD:	Tom Tom	LSE#:			
STATE:	NM	COUNTY:	Chaves	LOCATION:	660 FSL & 1980 FWL Sec 27, 7S-31E		
API NO:	30-005-20466	SPUD DATE:	3/6/1975	FORMATION:	San Andres		
TD:	4080'	PBTD:	4060'	GL ELEVATION:	4348	KB ELEVATION:	4357

PIPE RECORD										CEMENT DATA		
CSG	OD	ID	Grd	Thrd	Wt/Ft	Depth(ft)	Hole Sz(in)	Collapse Str	Burst Str	Ten Str	SX	TOC
Surf	8.625"	8.097"	J-55	-	24.0#	385'	12.250"	2950 psi	2950 psi	244000 psi	200 sx cl C	Surf
Intrmed	N/A	0.000"	-	-	0.0#	0'	0.000"	-	-	-		0'
Prod	4.500"	4.090"	J-55	-	10.5#	4080'	7.875	4010 psi	4790 psi	132000 psi	250 sx	2225(calc)
Tbg	.000"	0	-	-	0.0#	0'	-	8100 psi	7700 psi	71730 psi		

Remarks:

4/15/1975 Perforated intervals: 4,028'-4,034', 2SPF
Acid treated with 1000 gal 20% Ne acid followed by 2000 gal 15% Ne
ISDP - 1650 psi, Break down @ 2000psi, avg press 1700 psi @ 1.6 bpm
Perforated intervals: 3,919'-3,971', 1SPF
Acid treated w/ 2,500 gal 20% Ne acid fol by 2500 gal 15% Ne acid and 20 ball sealers
ISDP - 1300 psi, Break down @ 1500 psi, avg press 1400 psi @ 2 bpm

Propsed Perfs: San Andres P3 upper (3,974' - 3,993') 4SPF
(3,974' - 3,974') - 1' (4 holes)
(3,982' - 3,982') - 1' (4 holes)
(3,988' - 3,988') - 1' (4 holes)
(3,991' - 3,993') - 3' (12 holes)

CAPACITIES	(bbl/ft)	(ft/bbl)	(cf/ft)
4.5"/24#	.01590	62.70	.08960
2.375"/4.7#	.00390	258.65	.02170

VOL BETWEEN	(bbl/ft)	(ft/bbl)	(cf/ft)
TBGxCSG	.01050	95.51	.05880
CSGxHOLE	.12610	7.93	.70800

PERFORATION RECORD

DATE	TOP	BTM	ZONE	STATUS	SPF
4/15/1979	3919'	3922'	San Andres	Open	1
	3926'	3926'	San Andres	Open	1
	3929'	3929'	San Andres	Open	1
	3931'	3931'	San Andres	Open	1
	3935'	3935'	San Andres	Open	1
	3940'	3940'	San Andres	Open	1
	3944'	3945'	San Andres	Open	1
	3955'	3955'	San Andres	Open	1
	3959'	3959'	San Andres	Open	1
	3964'	3964'	San Andres	Open	1
	3967.0	3967'	San Andres	Open	1
	3971'	3971'	San Andres	Open	1
	4028'	4032'	San Andres	Open	2
	4033'	4034'	San Andres	Open	2

* Safety Factor Not Included

PREPARED BY: Casey Satterfield
DATE: 3/20/2013
Updated: 4/1/2013

OFFICE:
FAX: