

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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.

JUN 13 2013

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

RECEIVED

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMLC062391
2. Name of Operator DEVON ENERGY PRODUCTION CO. LP Contact: ERIN L WORKMAN E-Mail: ERIN.WORKMAN@DVN.COM		6. If Indian, Allottee or Tribe Name
3a. Address 333 WEST SHERIDAN AVENUE OKC, OK 73102	3b. Phone No. (include area code) Ph: 405-552-7970	7. If Unit or CA/Agreement, Name and/or No. <30865>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 5 T18S R33E 1980FSL 1980FWL Unit K		9. API Well No. 30-025-31517
		10. Field and Pool, or Exploratory CORBIN, WOLF CAMP, SOUTH <13155> BONE SPRING
		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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleate 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 recompleation 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.)

Devon Energy Production Company, LP respectfully requests requests to abandon existing Wolfcamp perfs & recompleate to the Bone Spring with the following procedure:

1. MIRU PU. POOH w/ rods & pmp. ND WH. NU 5K BOP & Tst. Unset TAC & POOH w/ BHA.
2. RIH w/ CIBP & set @ ~9600'. PT 500psi. PUH & spot 100' Class H cmt plug to 9500'(Top of Leonard).
3. PUH & Rev.circ tbg clean. PT csg. 2500psi.
4. RU WL. Perf as follows: 2nd Bone Spring; 9071'-9090' @ 2 spf, 3rd Bone Lime; 9320'-9330' @ 3 spf, TOTAL 68 shots.
5. RD WL. PU pkr. w/ RBP & ball catcher. RU hydro testers. RIH w/ tbg. & tst.8400psi.

**SUBJECT TO LIKE
APPROVAL BY STATE**

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct. Electronic Submission #199754 verified by the BLM Well Information System For DEVON ENERGY PRODUCTION CO.,LP, sent to the Hobbs	
Name (Printed/Typed) ERIN L WORKMAN	Title REGULATORY COMPLIANCE ASSOC.
Signature (Electronic Submission)	Date 02/22/2013
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
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 18 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.	

APPROVED
JUN 11 2013
[Signature]
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

JUL 08 2013

Additional data for EC transaction #199754 that would not fit on the form

32. Additional remarks, continued

6. Set RBP @9400'. PT 1000psi. Set pkr @ ~9250 & tst. on backside
7. MIRU acidize perfs. Set pkr & tst 500psi. on backside. Spearhead w/ 3000g 15% HCL; dropping BS.
8. RIH & latch onto RBP. PUH & set @ 9200'. Tst. 1000psi. PUH & set pkr @ ~9000'. Tst to backside 1000psi.
9. Acidize second set of perfs w/ 2500g 15% HCL & dropping ball sealers. RDMO.
10. Rls pkr. Latch onto RBP & Set RBP & pkr at original depth. Test, MIRU & Swab.
11. RU & frac 2nd Bone Spring Lower perfs.
12. FWB. RIH & latch onto RBP. POOH w/ pkr & RBP.
13. RU WL. Perf as follows: 8802'- 8820' @ 2 spf. TOTAL 36 shots.
14. RD WL. Set RBP @ 9000'. Tst 1000psi. PUH & set pkr @ ~8740'.
15. RU acid crew. Acidize w/ 2500g 15% HCL w/ BS. RD acid crew. Reset pkr & swab.
16. If OC is favorable RU & frac 2nd Bone Spring Upper perfs.
17. FWB. RIH & circ sand off RBP. POOH w/ pkr & RBP.
18. RIH w/ sd screen, SN & tbg. Set @ ~9200' & TAC ~8700'.
19. RIH w/ rods & pmp. Load & tst pump. RDMO PU.

Attachments: Procedure, Rod design, & Wellbore Schematic

Thank you!

[illegible]

Kachina 5 Fed #3

WBS#

Objective - Abandon existing Wolfcamp perms & Recomplete to the Bone Spring in order to get this well off Devon's inactive list.

API# - 30-025-31517

Location - Lea Co. - Sec 5-18S-33E

GL - 3972

KB - 3988 (16')

TD - 11,500

PBTD - 11,417

Casing	OD	WT/FT	Grade	Top	Bottom	TOC	80% Collapse (psi)	80% Burst (psi)
Surface	13-3/8	48	H-40	0	478	Surface		
Intermediate	8-5/8	32	K55	0	3100	Surface		
Production	5-1/2	17#	N-80	0	11,500	7630	5024	6192
Production								
Tubing	2-7/8	6.5	N-80	0	11,276		8928	8456

Current perforations: 10,736-11,263 (Wolfcamp-232 total perms) & 9623 - 9757 (Wolfcamp-49 total perms from previous recomplete-acidized only).

Current BHA: 303jts tubing, TAC @ 9,455, 9jts tubing, SN, Perf Sub, 1jt tbg, BP

Rods: PR, 3 Pony rods (20ft), 180 FG rods, 107 7/8 rods, 10 1-1/2 K Bars, shear tool, 1-1/2 pump, 6ft gas anchor.

Procedure

- 1) Test anchors. MIRU PU. POOH with pump & rods. Lay down K-bars & sent to yard for retirement.
- 2) ND WH. NU 5K Manual BOP with 3K studs. Test BOP to Devon guidelines. Unset TAC and POOH w/ BHA- Tally pipe OOH. **Note fluid level while coming out of hole.**
- 3) RIH w/ CIBP on tubing making sure to slow down before fluid level. RIH & set CIBP at ~9600'. Drop ball and set plug. Pressure test CIBP to 500 psi. PUH & spot 100ft Class H cement plug to 9500ft (Top of Leonard). $[(100 \times 0.1305) / (1.18)] = 11 \text{ sxs round to } 15 \text{ sxs.}$ ²⁰⁰ ₂₅
- 4) PUH & reverse circulate tubing clean. SDFN. Tag cement top the following morning. POOH. Pressure test casing to 2,500psi
- 5) RU WL. Perforate 3rd Bone Lime & 2nd BS Lower Sand as follows:

Formation	Perf Interval (ft)	Feet	Density (spf)	Phasing (°)	Charge (in)	# of Holes
2nd Bone Ss Lower	9071 - 9090	19	2	60	0.42	38
3rd Bone Lime	9320 - 9330	10	3	120	0.42	30

2/22/2013

- 6) RD WL. PU/MU 5-1/2 10K packer with RBP & ball catcher. RU hydro testers. RIH with tandem tools testing tubing to 8,400psi bellow slips.
- 7) Set RBP at 9400ft. Pressure test to 1000psi. Set Packer at ~9250 & attempt to test backside.
- 8) RU acidizing company. Spot acid across 3rd Bone Lime Perfs. Set packer and test backside.
- 9) Apply 500 psi on backside. Spearhead in with 3,000 gals 15% HCL dropping ball sealers. Shut in for 30 minutes.
- 10) Bleed back well and flow down. Knock off lines. RIH & latch onto RBP. PUH & set RBP at 9200'. Test to 1000psi. PUH & set packer at ~9,000ft. Test backside to 1000psi. Hook up & re-test lines on acid crew.
- 11) Acidize Lower 2nd Bone Spring sand with 2,500gal 15% HCL & ball sealers. RDMO acid crew.
- 12) Release packer & latch onto RBP. Set RBP & packer at original depth & test 3rd Bone Lime. Begin swab testing noting % oil cut. ***Zone appears tight on logs, but we're testing based on Kachina 5-2 recompletion success. All signs point to not fracing this interval.**
- 13) After testing is complete, PUH & begin swab testing Lower 2nd Bone Spring Ss. Swab tubing dry & begin making hourly swab runs noting % oil cut/fluid entry per hour.
- 14) If oil cut is favorable prep to frac. RU frac crew, frac Lower 2nd Bone Spring with 40,000#s of 20/40.
- 15) Flow back well at 30 bbl/hr for the 1st 3 hours. Open well up to 60 bbl/hr until well dies.
- 16) RIH & latch onto RBP. POOH with packer & RBP.
- 17) RU WL. Perforate Upper 2nd Bone Ss perfs as follows:

Formation	Perf Interval (ft)	Feet	Density (spf)	Phasing (°)	Charge (in)	# of Holes
2nd Bone Ss Upper	8802 - 8820	18	2	60	0.42	36

- 18) RD WL. RIH w/ tandem tools. Set RBP at 9,000ft. Test RBP to 1000psi. PUH & set packer at ~8,740'.
- 19) RU acid crew. Acidize upper 2nd Bone Spring with 2500 gal 15% HCL with ball sealers. RD acid crew. Knock balls off perfs & reset packer & begin swab testing as above. Frac depending on swab test.
- 20) If oil cut is favorable prep to frac. RU frac crew, frac Upper 2nd Bone Spring with 40,000#s of 20/40.
- 21) Flow back well at 30 bbl/hr for the 1st 3 hours. Open well up to 60 bbl/hr until well dies.
- 22) RIH & latch onto circulate sand off RBP. POOH with packer & RBP.
- 23) RIH w/ 28ft sand screen, SN and tubing. Set SN at ~9,200' & TAC ~8,700'.
- 24) RIH w/ new rods & pump- lay down FG rods if successful fracs. See Rodstar report for rod design. RIH with 1-3/4" x 26' pump & Stanley Filter. Load & test pump. RDMO PU. Begin flow testing to get well off inactive list.

RODSTAR-V 3.4.0

Company: Devon Energy
Well: Kachina 5-3
Disk file: KACHINA 5-3.rsvx
Comment:

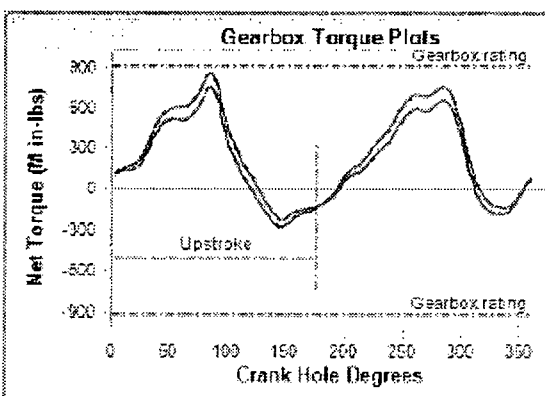
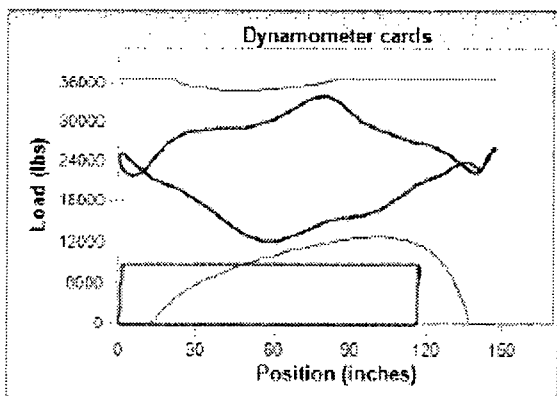
(c) Theta Oilfield Services, Inc. (www.gotheta.com)

Page 2 of 4
User: BAE
Date: 2/19/2013

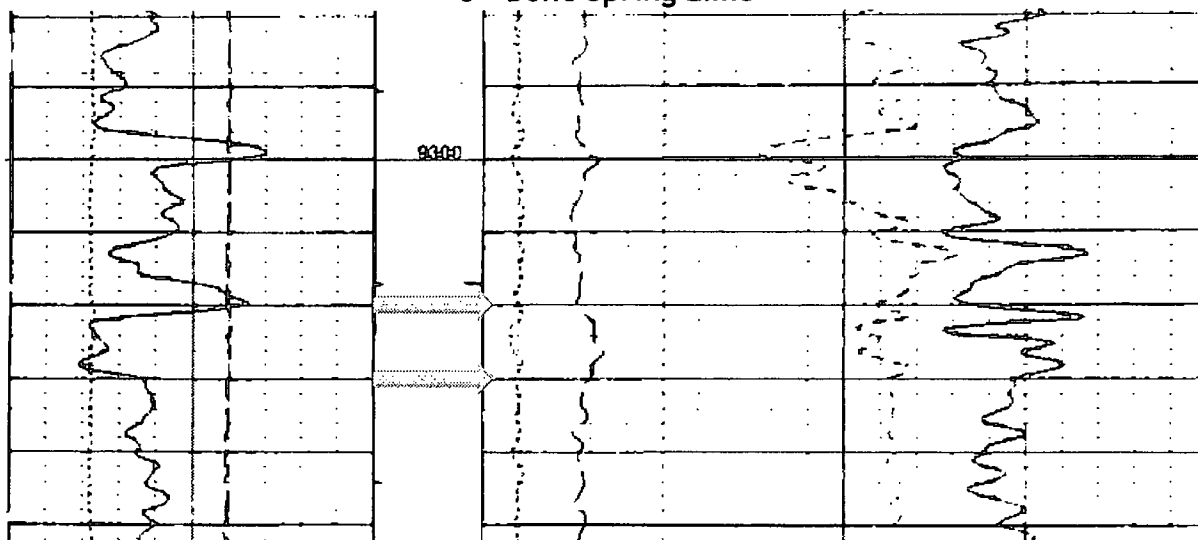
INPUT DATA				CALCULATED RESULTS (TOTAL SCORE: 95% Grade A)			
Strokes per minute:	8	Fluid level		Production rate (bfpd):	282	Peak pol. rod load (lbs):	33955
Run time (hrs/day):	24.0	(ft from surface):	9000	Oil production (BOPD):	113	Min. pol. rod load (lbs):	12159
Tubing pres. (psi):	50	(ft over pump):	200	Strokes per minute:	8	MPRU/PPRL	0.358
Casing pres. (psi):	50	Stuf. box fr. (lbs):	100	System eff. (Motor->Pump):	41%	Unit struct. loading:	93%
		Pol. Rod Diam: 1.5"		Permissible load HP:	83.9	PRHP / PLHP	0.35
Fluid properties		Motor & power meter		Fluid load on pump (lbs):	8705	Buoyant rod weight (lbs):	18877
Water cut:	60%	Power Meter Detent		Polished rod HP:	29.6	NiNo: .288	Fo/SKr: .361
Water sp. gravity:	1	Electr. cost: \$.06/KWH		Required prime mover size			
Oil API gravity:	42.0	Type: NEMA D		(speed var. not included)		BALANCED (Min Ener)	BALANCED (Min Torq)
Fluid sp. gravity:	0.9262			NEMA D motor:	75 HP	75 HP	
Pumping Unit: Lufkin Conventional - New (C-912D-36*)				Single/double cyl. engine:	60 HP	60 HP	
API size: C-912-365-168 (unit ID: CL5)				Multicylinder engine:	75 HP	75 HP	
Crank hole number	#2 (out of 4)			Torque analysis and electricity consumption			
Calculated stroke length (in):	146.9					BALANCED (Min Ener)	BALANCED (Min Torq)
Crank Rotation with well to right:	CCW			Peak g'box torq. (M in-lbs):	866	761	
Max. CB moment (M in-lbs):	Unknown			Gearbox loading:	94.9%	83.4%	
Structural unbalance (lbs):	-1500			Cyclic load factor:	1.7	1.7	
Crank offset angle (deg):	0.0			Max. CB moment (M in-lbs):	1761.93	1857.26	
Tubing and pump information				Counterbalance effect (lbs):	23483	24977	
Tubing O.D. (ins):	2.875	Upstr. rod-tbg fr. coeff:	0.500	Daily electr. use (KWH/day):	747	756	
Tubing I.D. (ins):	2.441	Onstr. rod-tbg fr. coeff:	0.500	Monthly electric bill:	\$1307	\$1383	
Pump depth (ft):	9200	Tub. anch. depth (ft):	8700	Electr. cost per bbl. fluid:	\$0.159	\$0.161	
Pump condition:	Full	Pump load adj. (lbs):	0.0	Electr. cost per bbl. oil:	\$0.398	\$0.402	
Pump type:	Tubing	Pump vol. efficiency:	85%	Tubing, pump and plunger calculations			
Plunger size (ins):	1.75	Pump friction (lbs):	200.0	Tubing stretch (ins):	.9		
Rod string design (rod tapers calculated)				Prod. loss due to tubing stretch (bfpd):	2.3		
Diameter (inches)	Rod Grade	Length (ft)	Min. Tensile Strength (psi)	Gross pump stroke (ins):	117.0		
+ 1	Norris 96	2625	140000	Pump spacing (in. from bottom):	27.6		
0.875	Norris 96	2950	140000	Minimum pump length (ft):	23.0		
0.75	Norris 96	2625	140000	Recommended plunger length (ft):	6.0		
+ 1	D (API)	1000	115000	Rod string stress analysis (service factor: 0.9)			
				Stress Load %	Top Maximum Stress (psi)	Top Minimum Stress (psi)	Bot. Minimum Stress (psi)
				80%	43269	15771	9066
				80%	41642	12144	5806
				80%	39389	7078	1646
				59%	15990	926	-255
				Stress Calc. Method			
				API MG T2.8			
				API MG T2.8			
				API MG T2.8			
				API MG			

+ Requires slimhole couplings.

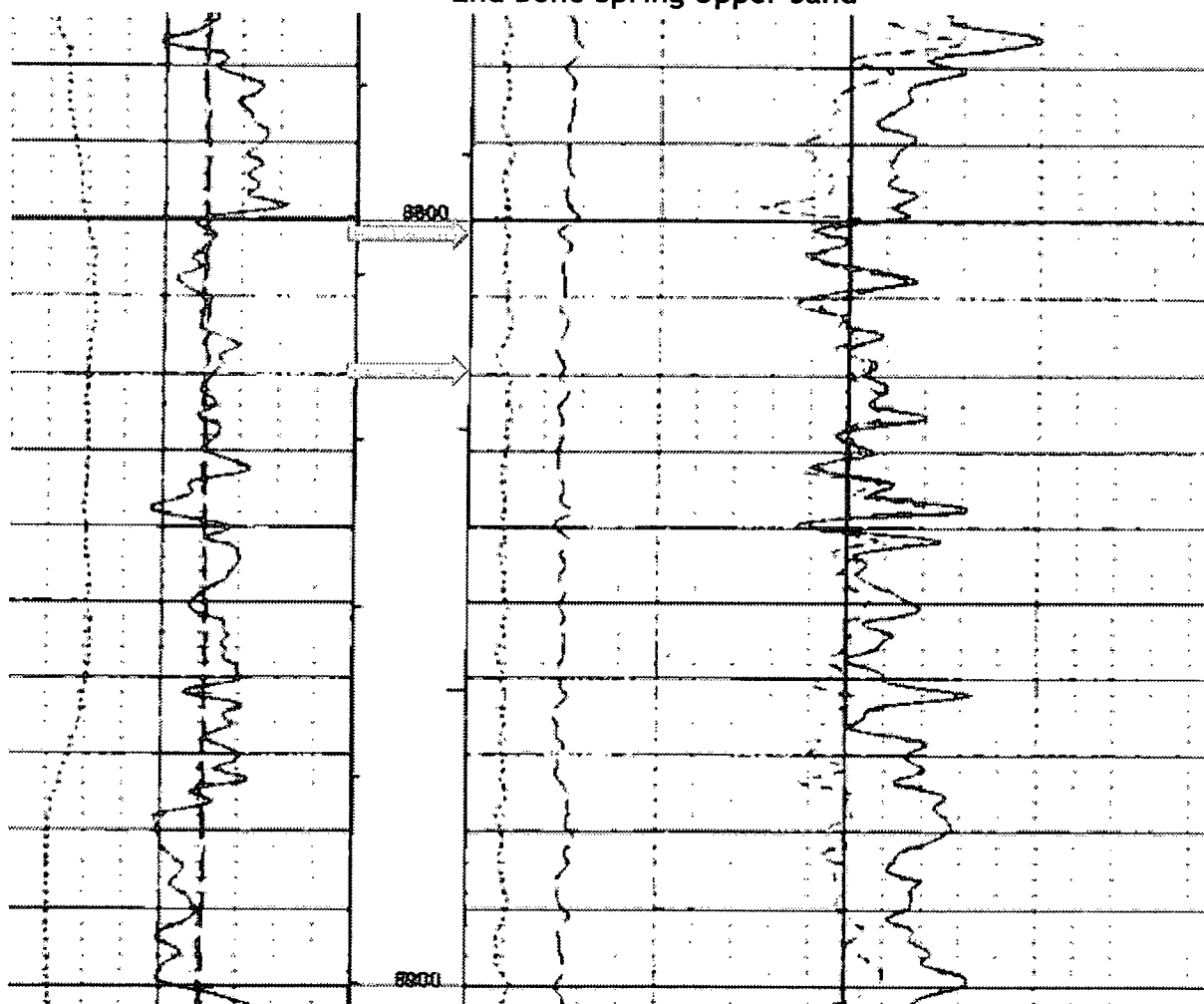
NOTE Stress calculations do not include buoyancy effects.



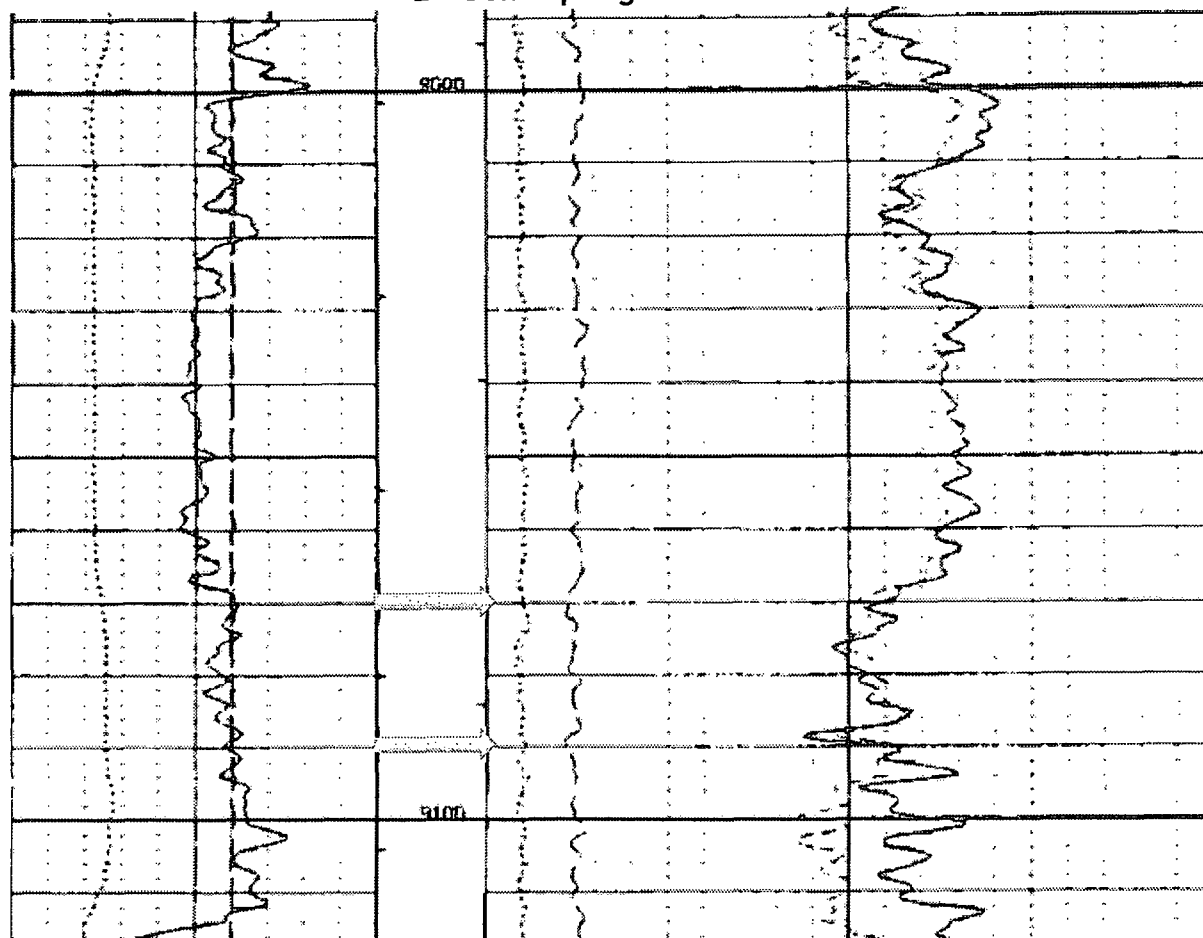
3rd Bone Spring Lime



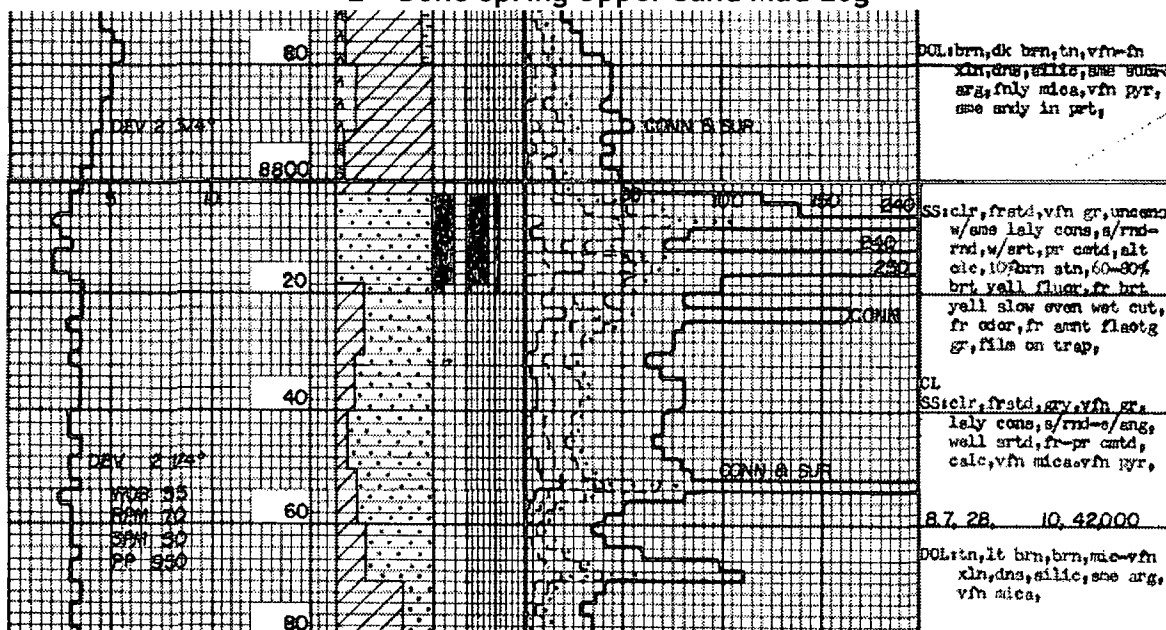
2nd Bone Spring Upper Sand



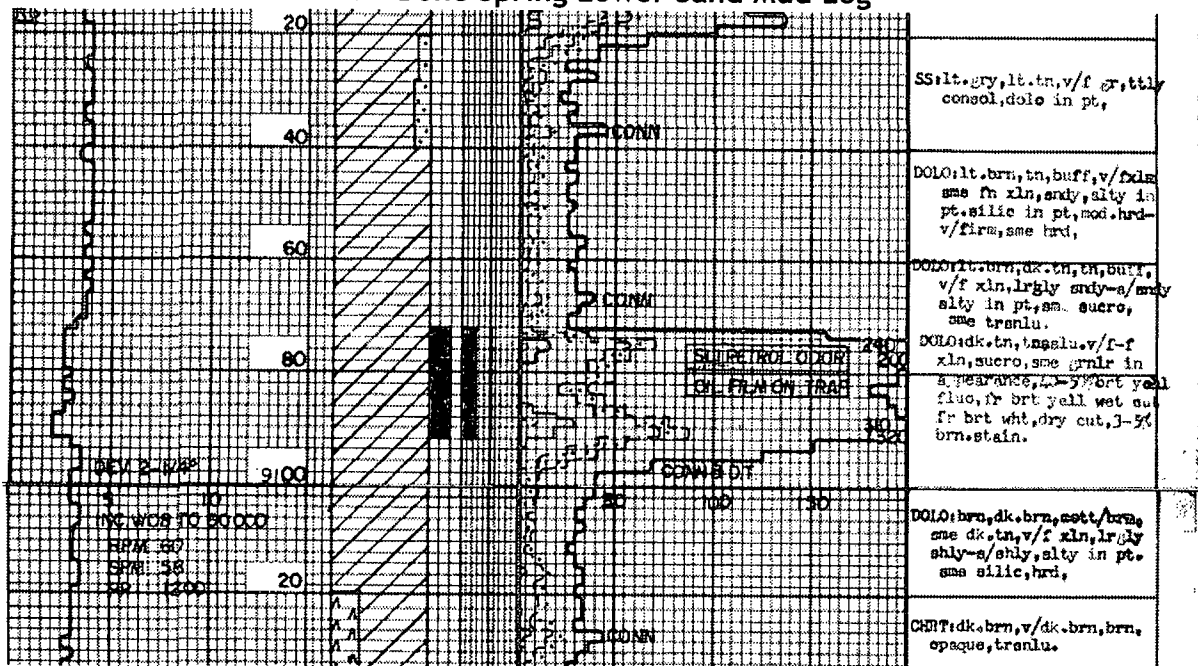
2nd Bone Spring Lower Sand



2nd Bone Spring Upper Sand Mud Log



2nd Bone Spring Lower Sand Mud Log



Kachina 5 Federal 3
30-025-31517
Devon Energy Production Co., LP
June 11, 2013
Conditions of Approval

Notify BLM at 575-393-3612 a minimum of 24 hours prior to commencing work.

Work to be completed by September 11, 2013.

- 1. Operator shall place CIBP at 9600' and place a 200' class H cement plug on top. Tag required.**
- 2. Must conduct a casing integrity test to maximum treating pressure before any work can be done. Submit results to BLM.**
3. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
4. Surface disturbance beyond the originally approved pad must have prior approval.
5. Closed loop system required.
6. All waste (i.e. drilling fluids, 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.
7. Operator to have H2S monitoring equipment on location.
8. A minimum of a 3000 (3M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (3M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.

9. Subsequent sundry required detailing work done and completion report with the new formation. The completion report shall include production from each formation. Operator to include well bore schematic of current well condition when work is complete.

JAM 061113