

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Artesia

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.**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMLC065680
2. Name of Operator DEVON ENERGY PRODUCTION CO Contact: LINDA GOOD Email: linda.good@dvn.com		6. If Indian, Allottee or Tribe Name
3a. Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405.552.6558	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 25 T18S R31E NWNW 1250FNL 660FWL		8. Well Name and No. SHUGART 25 FED COM 2
		9. API Well No. 30-015-31758-00-S1
		10. Field and Pool, or Exploratory N SHUGART
		11. County or Parish, and State EDDY 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 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.)

Devon Energy Production Co., L.P. respectfully requests permission to recomplete to the Bone Spring SS and Lower Brushy Canyon per the attached procedure.

Please find attached the Recompletion procedure, Current and Proposed wellbore diagrams.

*\* need Morrow plug - see COAs.*

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

*Provide C102*

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
APR 06 2015

Accepted for record  
*ASD* NMOCB 4/27/15

14. I hereby certify that the foregoing is true and correct.  
Electronic Submission #291937 verified by the BLM Well Information System  
For DEVON ENERGY PRODUCTION CO LP, sent to the Carlsbad  
Committed to AFMSS for processing by JENNIFER SANCHEZ on 03/31/2015 (15JAS0257SE)

Name (Printed/Typed) LINDA GOOD	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 02/17/2015

**APPROVED**

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE MAR 31 2015**

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 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.



**Shugart 25 Fed Com 2  
BSSS & LBC Recompletion**

**Shugart 25 Fed Com 2  
BSSS (1,2,3) & Lower Brushy Canyon Recompletion  
WBS#: XX-XXXXX.XX**

**Objective** - PA the Atoka; DFIT, recomplete and stimulate, tracer log BSSS and LBC.

API# - 30-015-31758      Location - Eddy Co.--Sec 25-18S-31E      Lat: 32 Deg 43' 19.66" N  
 GL - 3,678'                      KB - 3,693' (15')                      Long: 103 Deg 49' 44.292" W  
 TD - 12,178'                      PBDT - 12,090' (1750 SX)

Casing	OD	ID	Drift	WT/FT	Grade	Top	Bottom	TOC	Collapse (psi, 100%)	Burst (psi, 100%)
Surface	13-3/8"	12.715"	12.559"	48	H-40	15'	791'	Surface	770	1,730
Intermediate	8-5/8"	7.921"	7.796"	32	K-55	15'	4,289'	Surface	2,530	3,930
Production	5-1/2"	4.778"	4.653"	20	L-80	15'	1,433'	-	8,830	9,190
Production	5-1/2"	4.892"	4.767"	17	L-80	15'	9,585'	-	6,290	7,740
Production	5-1/2"	4.778"	4.653"	20	L-80	15'	12,175'	4,638'	8,830	9,190
Prd Tbg	2-3/8"	1.995"	1.901"	4.7	L-80	15'	10,650'	-	11,780	11,200'

\*\*\*NOTE: CONFIRM TBG MAKE WHEN PULLING – INCONSISTENT RECORDS\*\*\*

- Current perforations: 11,670'-12,042' (Morrow)
- Expected TOC (CBL Survey 9/6/2001) - 4,638'
- Current BHA (top to bottom)
  - 333 jts 2-3/8" 4.7# L-80
  - 1.81" SN
- Production Facility: Shugart 25 Fed Com 2 Oil - No Shared Wells

**Safety:** All personnel will wear hard hats, safety glasses with side shields and steel toed boots while on location. Assess wellhead working height for safety. If needed, use work platform or man-lift for fall protection.

Devon Contacts	Contact Name	Office Location	Office Phone	Cell Phone	E-mail
Sr. Completions Foreman	Ronnie Carre	Artesia	575-748-0179	575-748-5528	<a href="mailto:Ronnie.Carre@dvn.com">Ronnie.Carre@dvn.com</a>
Completions Foreman	Martin Jimenez	Artesia	575-748-0197	575-513-5819	<a href="mailto:Martin.Jimenez@dvn.com">Martin.Jimenez@dvn.com</a>
Production Foreman	Rudy Zuniga	Artesia	575-746-5575	575-390-5435	<a href="mailto:Rudy.Zuniga@dvn.com">Rudy.Zuniga@dvn.com</a>
Production Asst. Foreman	Ray Carter	Artesia	575-748-9928	575-513-0956	<a href="mailto:Ray.Carter@dvn.com">Ray.Carter@dvn.com</a>
Production Asst. Foreman	Librado Castillo	Artesia	N/A	N/A	<a href="mailto:Librado.Castillo@dvn.com">Librado.Castillo@dvn.com</a>
Production Asst. Foreman	Lynn Smith	Artesia	575-746-5554	575-748-5241	<a href="mailto:Lynn.Smith@dvn.com">Lynn.Smith@dvn.com</a>
Production Engineer	David Garza	OKC	405-228-2015	307-257-3077	<a href="mailto:David.Garza@dvn.com">David.Garza@dvn.com</a>
Completions Engineer	Mike Smith	OKC	405-552-8160	405-229-7983	<a href="mailto:Michael.Smith2@dvn.com">Michael.Smith2@dvn.com</a>
Production Engineer	Brent Schroder	OKC	405-552-4921	405-593-6714	<a href="mailto:Brent.Schroder@dvn.com">Brent.Schroder@dvn.com</a>



## Shugart 25 Fed Com 2 BSSS & LBC Recompletion

Construction/Facilities Foreman	Rick Campos	Artesia	575-746-5576	575-513-1933	Enrique.Campos@dvn.com
Construction/Facilities Foreman	Jack Pittman	Artesia	575-748-0186	575-513-1740	Jack.Pittman@dvn.com
EHS Professional	Amancio Cruz	Artesia	575-746-5582	575-513-2453	Amancio.Cruz@dvn.com
Automation Foreman	Danny Nolen	Artesia	575-748-0198	575-746-7810	Danny.Nolen@dvn.com
Measurement Foreman	Robert Hernandez	Artesia	575-748-9924	575-513-0060	Robert.Hernandez@dvn.com

**Procedure:** Please note BLM's COA and required BLM notifications/witnessing. Hold tailgate safety meetings prior to RU, each morning and before each operational change or event.

- 1) Test and/or install and test anchors. MIRU WSU (Well Service Unit). Spot necessary enclosed tanks, gas buster with flare stack and temporary flow lines to equipment. Record pressures on tbg and csg.
- 2) Top kill tbg and csg (if necessary) with 2% KCL.
- 3) ND Tree (send in tree to be serviced/maintained and tested for future use). NU 10K BOPE, w/1 set of blind rams on bottom plus 1 set of 2-3/8" pipe ram on top. Test BOPE to Devon guidelines.
- 4) MIRU WSU. TOO H w/ 2-3/8" tubing.
- 5) Plugback existing Morrow as follows (notify BLM for witness if required):
  - a) RU WLU w/ full 5K lubricator.
  - b) RIH w/ GRJB for 5-1/2" csg to +/- 11,700' KBM. *11,620' minimum of 50' above top most reef*
  - c) RIH w/ WL and 5-1/2", 20#, 10k CIBP to 11,650' KBM and set CIBP.
  - d) RIH and dump bail 35 sks (or 100') of class H neat cmt on top of CIBP @ 11,650' KBM. Make multiple runs if necessary.
  - e) WOC. Tag TOC (top must be no lower than 11,550')
  - f) If ok, proceed to step 7. If not, contact field supervisor and OKC engineer.
  - g) RIH w/ Gyro (MD, Incl, Azm) to 11,550' or TOC. Record and report back to engineer.
- 6) RD WL. RU WSU. PU 2-3/8" tbg and RIH to ~11,550'.
- 7) Bring in ~500 bbls 10 ppg Brine. Load, circulate and balance hole.
- 8) Plugback existing Atoka as follows (notify BLM for witness if required):
  - a) RU cmt crew and spot x bbls of 9 ppg spud mud.
  - b) PUH to 11,141' and spot x sx (or 243') of class H neat cmt across the Atoka (11,191'-11,434') at 11,141' to 11,484" (50' below and above).
  - c) WOC and tag TOC (top must be no lower than 11,191').
  - d) Spot x bbls 9 ppg spud mud.
  - e) *OK* PUH to 9,578' and spot x sx (or 520') of class H neat cmt across the Wolfcamp (9,808'-10,328') at 9,578' to 10,378' (50' below and above).
  - f) WOC and tag TOC (top must be no lower than 9,808'). TOO H w/ tbg

*See COAS  
need a plug to seal top of Morrow.*



## Shugart 25 Fed Com 2 BSSS & LBC Recompletion

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- 9) PU 5-1/2" pkr and RIH to 6,200'. Set pkr and MIT casing to 6,000 psi for 30 minutes. Send chart into the BLM.
- 10) MIRU WL with full lubricator. Make GR run and correlate to Schlumberger Triple Combo Logs ran on 12/18/2001. Perforate (with 3-1/8" slick guns) the 3<sup>rd</sup> Bone Spring from 9,747-9,770' @ 3 spf w/ 60° phasing.
- 11) RD WL. PU 5-1/2" packer and 3-1/2" flush jnt rental frac string, pressure testing underneath the slips to ~6,000#, and TIH to 9,600' and set pkr. RDMO WSU.
- 12) RU pressure truck and all surface equipment per Devon guidelines.
- 13) Perform DFIT analysis on 3BSSS. Ensure that all surface measurement equipment is in place and records accurate pressures throughout the job. Record pressures for 3 weeks.
- 14) Frac 3BSSS per vendor proposal. **Max surface pressure = 6,000 psi.**
  - Frac general info:
  - o 30-35 BPM
  - o Expected max STP is ~4,700 psi
  - o 150,000 lbs proppant
  - o Record average treating pressure, rates and job load along with ISIP, 5, 10 & 15 minute readings
  - o Last stage to be tagged w/ RA tracer.
- 15) SWI. RDMO frac crew.
- 16) Flow well back according to attached flowback procedure. Flow well for 4 weeks
- 17) RU WSU. Unset 5-1/2" pkr. TOOH and stand back 3-1/2" frac string.
- 18) RU WL, with full lubricator, and run gamma ray across the 3<sup>rd</sup> BSSS. Report findings to OKC.
- 19) RIH w/ 5-1/2", 20#, 10k CIBP to 9,700' KBM Set CIBP and dump 2 sx of sand.
- 20) Correlate to Schlumberger Triple Combo Logs ran on 12/18/2001. Perforate (with 3-1/8" slick guns) the Lower 2<sup>nd</sup> Bone Spring from 8,976-9,000' @ 3 spf w/ 60° phasing.
- 21) RD WL. PU 5-1/2" packer and 3-1/2" rental frac string, pressure testing underneath the slips to ~6,000#, and TIH to 8,800' and set pkr. RDMO WSU.
- 22) RU pressure truck and all surface equipment per Devon guidelines.
- 23) Perform DFIT analysis on 2BSSS. Ensure that all surface measurement equipment is in place and records accurate pressures throughout the job. Record pressures for 3 weeks.



## Shugart 25 Fed Com 2 BSSS & LBC Recompletion

- 24) Frac Lower 2<sup>nd</sup> BSSS per vendor proposal. Max surface pressure = 6,000 psi.
- Frac general info:
- 30-35 BPM
  - Expected max STP is ~4,700 psi
  - 150,000 lbs proppant
  - Record average treating pressure, rates and job load along with ISIP, 5, 10 & 15 minute readings
  - Last stage to be tagged w/ RA tracer.
- 25) SWI. RDMO frac crew.
- 26) Flow well back according to attached flowback procedure. Flow well for 4 weeks
- 27) RU WSU. Unset 5-1/2" pkr. TOOH and stand back 3-1/2" frac string.
- 28) RU WL, with full lubricator, and run gamma ray across the Lower 2<sup>nd</sup> BSSS. Report findings to OKC.
- 29) RIH w/ 5-1/2", 20#, 10k CIBP to 8,970' KBM Set CIBP and dump 2 sx of sand.
- 30) Correlate to Schlumberger Triple Combo Logs ran on 12/18/2001. Perforate (with 3-1/8" slick guns) the Upper 2<sup>nd</sup> Bone Spring from 8,912-8,920' @ 3 spf w/ 60° phasing.
- 31) RD WL. PU 5-1/2" packer and 3-1/2" rental frac string, pressure testing underneath the slips to ~6,000#, and TIH to 8,800' and set pkr. RDMO WSU.
- 32) RU pressure truck and all surface equipment per Devon guidelines.
- 33) Perform DFIT analysis on 2BSSS. Ensure that all surface measurement equipment is in place and records accurate pressures throughout the job. Record pressures for 3 weeks.
- 34) Frac Upper 2<sup>nd</sup> BSSS per vendor proposal. Max surface pressure = 6,000 psi.
- Frac general info:
- 30-35 BPM
  - Expected max STP is ~4,700 psi
  - 150,000 lbs proppant
  - Record average treating pressure, rates and job load along with ISIP, 5, 10 & 15 minute readings
  - Last stage to be tagged w/ RA tracer.
- 35) SWI. RDMO frac crew.
- 36) Flow well back according to attached flowback procedure. Flow well for 4 weeks
- 37) RU WSU. Unset 5-1/2" pkr. TOOH and stand back 3-1/2" frac string.
- 38) RU WL, with full lubricator, and run gamma ray across the Upper 2<sup>nd</sup> BSSS. Report findings to OKC.
- 39) RIH w/ 5-1/2", 20#, 10k CIBP to 8,900' KBM Set CIBP and dump 2 sx of sand.
- 40) Correlate to Schlumberger Triple Combo Logs ran on 12/18/2001. Perforate (with 3-1/8" slick guns)



## Shugart 25 Fed Com 2 BSSS & LBC Recompletion

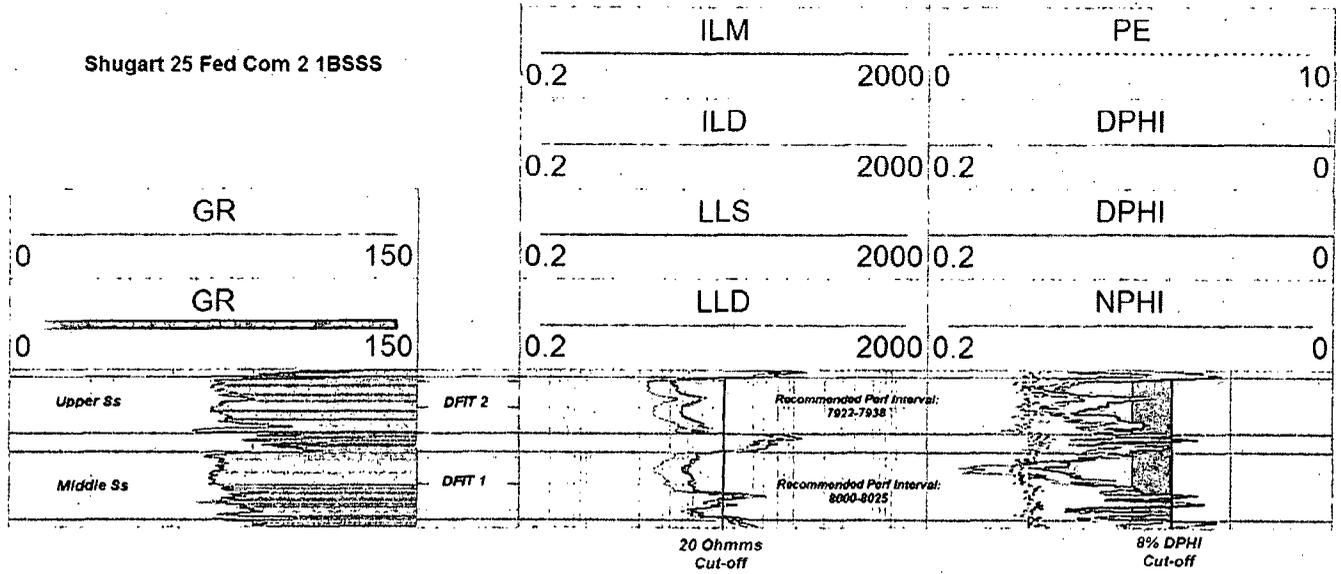
the 1st Bone Spring from 7,922'-7,938' @ 3 spf w/ 60° phasing.

- 41) RD WL. PU 5-1/2" packer and 3-1/2" rental frac string, pressure testing underneath the slips to ~6,000, and TIH to 7,800' and set pkr. RDMO WSU.
- 42) RU pressure truck and all surface equipment per Devon guidelines.
- 43) Perform DFIT analysis on 1BSSS. Ensure that all surface measurement equipment is in place and records accurate pressures throughout the job. Record pressures for 3 weeks.
- 44) Frac 1<sup>st</sup> BSSS per vendor proposal. **Max surface pressure = 6,000 psi.**
  - Frac general info:
  - 30-35 BPM
  - Expected max STP is ~4,700 psi
  - 150,000 lbs proppant
  - Record average treating pressure, rates and job load along with ISIP, 5, 10 & 15 minute readings
  - Last stage to be tagged w/ RA tracer.
- 45) SWI. RDMO frac crew.
- 46) Flow well back according to attached flowback procedure. Flow well for 4 weeks
- 47) RU WSU. Unset 5-1/2" pkr. TOOH and stand back 3-1/2" frac string.
- 48) RU WL, with full lubricator, and run gamma ray across the Lower 2<sup>nd</sup> BSSS. Report findings to OKC.
- 49) RIH w/ 5-1/2", 20#, 10k CIBP to 6,000' KBM Set CIBP and dump 2 sx of sand.
- 50) Correlate to Schlumberger Triple Combo Logs ran on 12/18/2001. Perforate (with 3-1/8" slick guns) the Brushy Canyon from 6,380-6,400' @ 2 spf w/ 60° phasing.
- 51) RD WL. PU 5-1/2" packer and 3-1/2" rental frac string, pressure testing underneath the slips to ~6,000, and TIH to 6,200" and set pkr. RDMO WSU.
- 52) RU pressure truck and all surface equipment per Devon guidelines.
- 53) Perform DFIT analysis on Brushy Canyon. Ensure that all surface measurement equipment is in place and records accurate pressures throughout the job. Record pressures for 3 weeks.
- 54) Frac Lower Brushy Canyon per vendor proposal. **Max surface pressure = 6,000 psi.**
  - Frac general info:
  - 30-35 BPM
  - Expected max STP is ~4,700 psi
  - 150,000 lbs proppant
  - Record average treating pressure, rates and job load along with ISIP, 5, 10 & 15 minute readings
  - Last stage to be tagged w/ RA tracer.



## Shugart 25 Fed Com 2 BSSS & LBC Recompletion

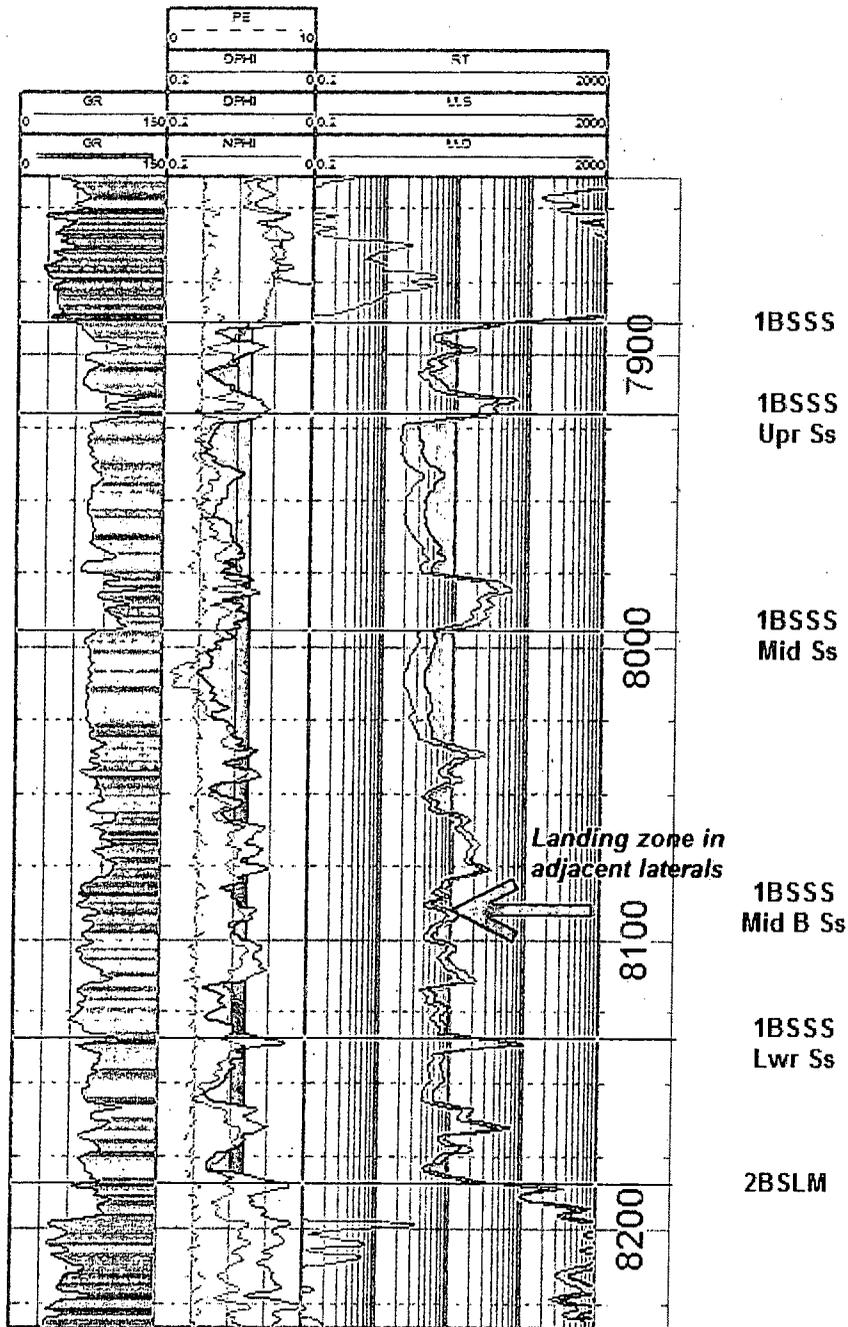
- 55) SWI. RDMO frac crew.
- 56) Flow well back according to attached flowback procedure. Flow well for 4 weeks.
- 57) RU WSU. Unset pkr. TOO H & LD 3-1/2" frac string.
- 58) PU 4-5/8" bit and drill out CIPBs to 9,700', circulate hole clean. TOO H
- 59) PU SN, 2-7/8" L-80 prod string and TIH to 9,770'. RIH w/ pump and rods and put well on prod.





Shugart 25 Fed Com 2  
BSSS & LBC Recompletion

30015317580000  
SHUGART 25 FED COM 2  
T18S R31E S25



**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: SHUGART 25 FED COM #2		Field: SHUGART; MORROW	
Location: 1250' FNL & 660' FWL; SEC 25-T18S-R31E		County: EDDY	State: NM
Elevation: 3678' GR		Spud Date: 7/6/01	Compl Date: 12/20/01
API#: 30-015-31758	Prepared by: Ronnie Slack	Date: 2/19/07	Rev:

PROPOSED

17-1/2" hole  
13-3/8", 48#, H40, STC, @ 791'  
 Cemented w/775 Sx. Cement to surface

12-1/4" hole  
8-5/8", 32#, K55, LTC, @ 4289'  
 Cemented w/1750 Sx. Cement to surface

TOC @ 4638'

Brushy Canyon  
 6380-6400'

1st BSS  
 7922' - 7938'  
 8000' - 8025'

Upper 2nd BSS  
 8912-8920'

Lower 2nd BSS  
 8976-9000'

3rd BSS  
 9,747-9,770'

DV Tool @ 9794'

Wolfcamp  
 9808' - 10328'

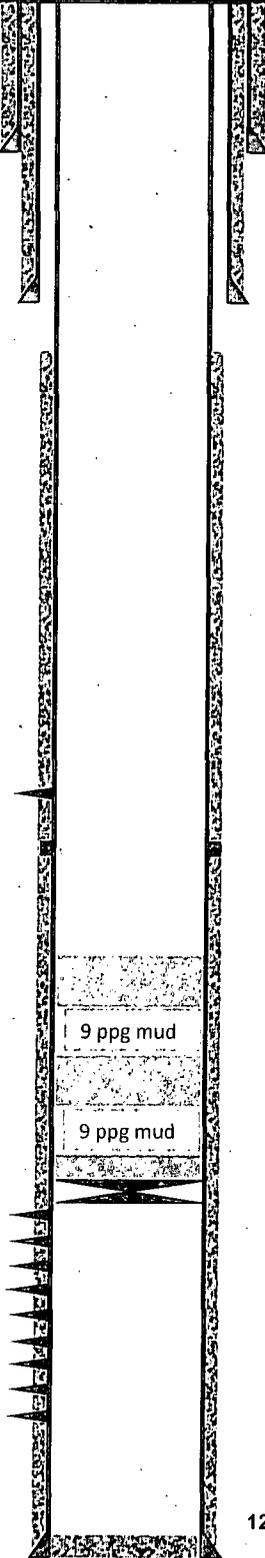
Atoka  
 11191' - 11434'

MORROW (9/11/01)

- 11670' - 11674'
- 11834' - 11838'
- 11874' - 11877'
- 11922' - 11926'
- 11948' - 11951'
- 11953' - 11957'
- 11960' - 11962'
- 11966' - 11974'
- 12038' - 12042'

11/01: Acidized w/19.5K gals 7.5% HCl, fraced w/43K gals + 50K # 20/40

7-7/8" Hole  
5-1/2", 17# & 20#, L80, LT&C, @ 12,175'  
 Cemented w/1750 Sx. TOC @ 4638' (CBL)



12,090' PBTD

12,178' TD

**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: SHUGART 25 FED COM #2		Field: SHUGART; MORROW	
Location: 1250' FNL & 660' FWL; SEC 25-T18S-R31E		County: EDDY	State: NM
Elevation: 3678' GR		Spud Date: 7/6/01	Compl Date: 12/20/01
API#: 30-015-31758	Prepared by: Ronnie Slack	Date: 2/19/07	Rev:

**CURRENT**

17-1/2" hole  
13-3/8", 48#, H40, STC, @ 791'  
 Cemented w/775 Sx. Cement to surface

12-1/4" hole  
8-5/8", 32#, K55, LTC, @ 4289'  
 Cemented w/1750 Sx. Cement to surface

TOC @ 4638'

DV Tool @ 9794'

**MORROW (9/11/01)**

- 11670' - 11674'
- 11834' - 11838'
- 11874' - 11877'
- 11922' - 11926'
- 11948' - 11951'
- 11953' - 11957'
- 11960' - 11962'
- 11966' - 11974'
- 12038' - 12042'

11/01: Acidized w/19.5K gals 7.5% HCl, fraced w/43K gals + 50K # 20/40

7-7/8" Hole  
5-1/2", 17# & 20#, L80, LT&C, @ 12,175'  
 Cemented w/1750 Sx. TOC @ 4638' (CBL)

**COMMENTS:**

- 12/20/01: On ESP pump
- 5/30/02: 2-3/8" tbg, on plunger. SN at 11743'. Eot 11745'
- 10/23/04: On plunger
- 2/28/05: On Plunger
- 5/23/05: ran 1-1/4" capillary string
- 1/11/06: Fished capillary string, & ran 1-1/4" capillary string (11,600')
- 10/6/06: On plunger.
- 10/13/06: Replace tubing with holes, RIH w/tubing. Set 10,668'
- 11/2/06: 366 jts 2-3/8", on plunger SN @ 11,740'. EOT 11,741'
- 11/16/06: on plunger
- 12/15/06: Tubing stop 10,650'. On plunger.

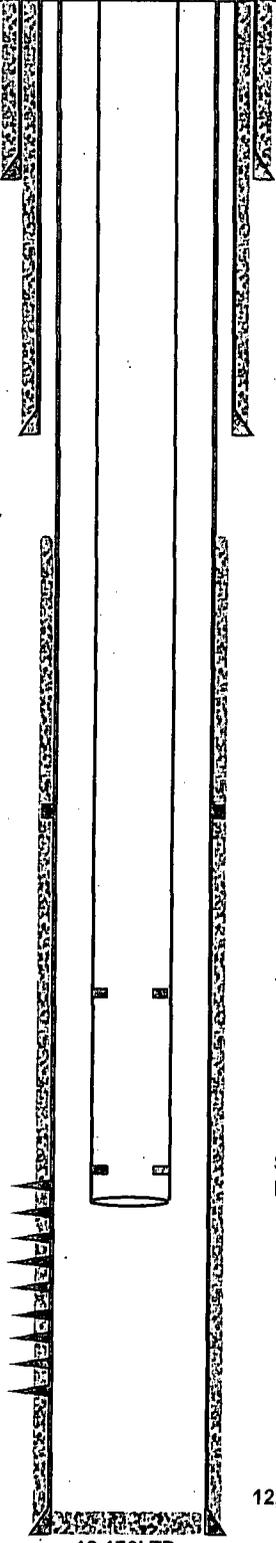
2-3/8" Production Tubing

Tubing Stop @ 10,650'

SN @ 11,740' (11/2/06)  
 EOT @ 11,741'

12,090' PBDT

12,178' TD



**Shugart 25 Fed Com 2**  
**30-015-31758**  
**Devon Energy Production Co., LP**  
**March 31, 2015**  
**Conditions of Approval**

**Notify BLM at 575-361-2822 a minimum of 24 hours prior to commencing work.**

**Work to be completed by July 1, 2015.**

- 1. Operator shall place CIBP at 11,620' (50 above top most perf) and place 35sx of Class H cement on top. WOC and tag.**
- 2. Operator shall place a balanced class H cement plug from 11,534-11,319' to seal the top of the Morrow formation. WOC. Operator may add additional cement to seal the Atoka as proposed.**

**Note: Operator may combine Step 1 and 2.**

- 3. Operator shall place a balanced class H cement plug from 10,328'-9,808' to seal the top of the Wolfcamp formation. WOC.**
- 4. Must conduct a casing integrity test before perforating and fracturing. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails**
- 5. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.**
- 6. Surface disturbance beyond the originally approved pad must have prior approval.**
- 7. Closed loop system required.**
- 8. 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.**
- 9. Operator to have H2S monitoring equipment on location.**

10. A minimum of a **5000 (5M) 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 (5M 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.

**11. Subsequent sundry required detailing work done and completion report with the new formation. Operator to include well bore schematic of current well condition when work is complete.**

**12. See attached for general requirements.**

**JAM 033115**

BUREAU OF LAND MANAGEMENT  
Carlsbad Field Office  
620 East Greene Street  
Carlsbad, New Mexico 88220  
575-234-5972

**Permanent Abandonment of Production Zone Conditions of Approval**

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within ninety (90) days from this approval.

**If you are unable to plug back the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged back. Failure to do so will result in enforcement action.**

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612
3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.
5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. **Subsequent Plug back Reporting:** Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date work was completed.**

7. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.