AT5-12-621

OCD-HOBBS HOBBS OCD

Form 3160-3 (August 2007)

SEP 2 4 2012

FORM APPROVED OMB No 1004-0137 Expires July 31, 2010

UNITED STATE	35		Expires .	July 51, 2010
DEPARTMENT OF THE	INTEDIOD	EIVED	5 Lease Serial No. NM 114990 %	PAL WA
BUREAU OF LAND MA APPLICATION FOR PERMIT TO		El 4 Per	6. If Indian, Allotee	
ATTEIOATION TONTENIMIT TO	Diffice Of the Livient			
a. Type of work: DRILL REEN	TER		ı	eement, Name and No.
o. Type of Well: Oil Well Gas Well 🗸 Other SV	VD Single Zone Mu	ultiple Zone	8. Lease Name and N.E. Salado Draw	Well No. < 39468 (Deep) Federal 1
Name of Operator			9 API Well No.	
DEVON ENERGY PRODUCTION CO	OMPANY, L.P. 0	137	30-025-28967	
Address 333 W. SHERIDAN AVENUE, OKLAHOMA CITY, OKLAHOMA 73102	3b Phone No. (include area code) 405.552.7848		10. Field and Pool, or	Exploratory 9680
			Su San T. D. M. and	1 1 SUC CARGO
Location of Well (Report location clearly and in accordance with At surface 1980 FNL & 660 FWL, 2	arty State requirements *)			Blk. and Survey or Area
At proposed prod. zone BHL. 1980 FNL & 660 FWL, 2			6-T26S-R34E	
Distance in miles and direction from nearest town or post office* 9 MILES WSW OF JAL, N.M.			12 County or Parish LEA	13. State NM
Distance from proposed* See Attached Map property or lease line, ft (Also to nearest drig, unit line, if any)	16 No. of acres in lease 1241.6	16 No. of acres in lease 17 Spacing Unit dedicated to		well
Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft			I/BIA Bond No. on file D1104	
Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*		23. Estimated duration	
320' GL	06/30/2012		45 DAYS	
	24. Attachments Dir	rections/C	omments/Scher	natics
following, completed in accordance with the requirements of Onsl	hore Oil and Gas Order No.1, must b	e attached to the	nis form:	
Well plat certified by a registered surveyor A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syste SUPO must be filed with the appropriate Forest Service Office)	Item 20 abov m Lands, the 5 Operator cert	e). tification		s may be required by the
Signature	Name (Printed/Typed)			Date
Signature	DAVID H. COOK			05/17/2012
REGULATORY ANALYST				
roved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Name (Printed/Typed) /s/ Don		Date SEP 1 9 2012
FIELD MANAGER Office CARLSBAD FIELD C		FFICE		
lication approval does not warrant or certify that the applicant ho	olds legal or equitable title to those r	ights in the su	bject lease which would	entitle the applicant to
uct operations thereon ditions of approval, if any, are attached.		Α	PPROVAL FO	R TWO YEARS
18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a es any false, fictitious or fraudulent statements or representations as	crime for any person knowingly an as to any matter within its jurisdiction	nd willfully to r	make to any department	or agency of the United
ontinued on page 2)	JD-1348		*(Ins	tructions on page 2)
arlsbad Controlled Water Basin	JD-1348 Va ogla	ester	/	

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DIRECTIONS:

From intersection of SR 128 & CR 1 (Orla Rd), go south on Orla Road 13.65 miles, turn left (East) on CR 2 (Battle Axe Road), go 11.8 miles to stop sign. Turn right & go 0.3 miles past Dinwiddie Road, turn left on CR 2 and go 1.9 miles; just before cattle guard, turn right on caliche road, go south 0.15 miles, turn left 0.2 miles to caliche road on south, go approx. 1600 feet to site.

APD COMMENTS:

Devon Energy Production Co., L.P. plans to re-enter this well, plugged and abandoned by Tex/Con Oil & Gas Company, and convert to SWD in the Delaware formation from 6018-6640'. A C-108 is being filed with the OCD-Santa Fe office.

A cultural survey was completed in this area in 1984 and additional fees for being within the PBMOA will not be required, as per Martin Stein, Carlsbad Field Office, Bureau of Land Management, April 18, 2012.

RE-ENTRY PROGRAM

Devon Energy Production Company, LP NE Salado Draw (Deep) Federal 1

Surface Location: 1980' FNL & 660' FWL, E, Sec 6 T26S R34E, Lea, NM Bottom Hole Location: 1980' FNL & 660' FWL, E, Sec 6 T26S R34E, Lea, NM

1. Geologic Name of Surface Formation

a. Quaternary Alluvium

2. Estimated Tops of Geological Markers:

a.	Rustler	897'
b.	Salado	1,176'
c.	Top Salt	· 1,488'
d.	Base Salt	4,967'
e.	Bell Canyon	5,212'
f.	Cherry Canyon	6,292'
g.	Brushy Canyon	7,760'
h.	Bone Spring	9,436'
i.	1 st Bone Spring SS	10,254'
j.	2 nd Bone Spring LS	10,654'
k.	2nd Bone Spring SS	11,027'
1.	3 rd Bone Spring LS	11,430'
m.	3 rd Bone Spring SS	12,079'
n.	Wolfcamp	12,495'
o.	Atoka	14,783
p.	Morrow	15,466'
,	Total Depth	16,320'

Casing Program:

Depth	Hole Size	Size	Grade	Weight	Thread	Condition
0-1022'	26"	20"	K-55	106.5#	BTC	
0-5257'	17 1/2"	13 3/8"	N-80 & K-55	68# & 72#	BTC	
2000-13000'	12 ¼"	9 5/8"	P-110	53.5#	LTC	
9850-15343'	8 1/2"	7"	Q-125	38#	BDS	
15047-16320'	8 1/2"	5"		20.3#		

Note: casing program listed above is based upon historical data; no new casing is planned.

3. **Cement Program:**

20"

a.

Surface

			CaCl. TOC @ surface.
b.	13 3/8"	Intermediate	Lead w/ 4850 sx Pacesetter Lite + 3% Salt + Hiseal, Tail w/ 530 sx Cl C Neat. TOC: circulated 500 sx to surface.
c.	9 5/8"	Intermediate	Lead w/ 1480 sx TLW + .75% CF-1 + 0.4% WR-2, Tail w/ 2210 sx Cl H + 0.75% CF-1 + 0.4% WR-2. Estimated TOC @ 2000'.
d.	7"	Intermediate	Lead w/ 900 sx Cl H + 1.5% CF-9 + 0.3% WR-10, TOC 12100' per CBL.
e.	5"	Liner	Lead w/ 160 sx Cl H + 0.9% CF-1 + 0.2% WR-2, TOC @ 14147'.

Lead w/ 1100sx Pacesetter Lite, Tail w/ 680 sx Cl C Neat + 2%

Note: cement data based upon historical data, filed 4/24/85.

Pressure Control Equipment + Sec COA
The BOP system used to drill the intermediate hole will consist of a 13-5/8" 5M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 5M system prior to drilling out the surface casing shoe.

COA

The BOP system used to drill the production hole will consist of a 13-5/8" 5M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 5M system prior to drilling out the intermediate casing shoe. See COA

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5,000 psi WP. See attached BOP stack diagram.

Proposed Mud Circulation System

Depth Mud Wt. Visc **Fluid Loss** Type System 0' - 6800'2% KCI Water

No mud products are anticipated to be used. Devon will circulate out the existing 9.5 ppg mud that is between the plugs with 2% KCI water.

wed for

4. Auxiliary Well Control and Monitoring Equipment:

a. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

5. Logging, Coring, and Testing Program: \See COA

Logs: Gamma Ray/CCL/CBL/Cased hole Neutron: 6700' to surface.

Cores: No coring program is planned.

DST's: None anticipated.

6. Potential Hazards:

a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 2900 psi and Estimated BHT 105°. No H2S is anticipated to be encountered.

7. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

Procedure

Devon Energy Production Company, LP NE Salado Draw (Deep) Federal 1

Surface Location: 1980' FNL & 660' FWL, E, Sec 6 T26S R34E, Lea, NM Bottom Hole Location: 1980' FNL & 660' FWL, E, Sec 6 T26S R34E, Lea, NM

- 1. Install and test anchors.
- 2. Remove dry-hole marker. Hot tap surface P&A plate to insure no pressure below surface plate before removal.
- 3. Remove surface plate (note csg ID for bit selection), weld on bell nipple (3K) and install wellhead with valves (3K). Spot any necessary tanks, half tanks (returns) and flow lines to tanks.
- NU 3K double ram BOPE (1 blind; 1 2-7/8" pipe). Test BOPEs to Devon specifications. 4.
- 5. Drill and clean out 13-3/8" and 9-5/8" casings to top of cement plug reported @ 6,800' KBM (tag plug to verify depth). Note: top of cut off 9-5/8" reported @ 2,000'. This will require bit change after reaching ~ 2,000'.
- Circ hole clean with 2% KCL. Test casings and bottom plug to 50 psi @ surface for 30 min and chart record pressure test. 6.

If pressure test was good, TOH and proceed to step 7

If not, TIH with 9-5/8", 53.5# packer and tubing to ~5,950' and set packer. Test annulus to 200 psi for 30 min and chart record pressure test. Notify engineering if preliminary MIT doesn't pass. Will need too further test 13-3/8" & 9-5/8" casings. TOH.

7. R.U. Wireline Service Company and full lubricator. Test lubricator to Devon specifications. Run in hole and set 9-5/8" CIBP @ 50' above top of cement plug tagged in Step 5. Dump bail 35' of cement on top of CIBP.

> Run Gamma Ray/CCL/CBL/Cased hole Neutron log from 6,700' to Surface (note TOC). Log the main run with 500 psi @ surface.

see COA -> CBL From TD to Surface

If bond log looks good above and below planned perforated intervals, perforate the Delaware as follows: 8. Perforate using 3-1/8" slick guns (4" charge loading) – 0.40" EHD. Correlate to: Schlumberger Compensated Neutron Litho Density Log dated 12/22/84

Top Shot	Bottom Shot	Feet	Phasing	SPF	Holes	
6,018'	6,028'	10	120	2	20	
6,040'	6,050'	10	120	2	20	
6,130'	6,150'	20	120	2	40	
6,315'	6,325'	10	120	2	20	
6,365'	6,380	365' 6,380'	15	120	2	30
6,465'	6,480'	15	120	2	30	
6,530'	6,535'	5	120	2	10	
6,630'	6,640'	10	120	2	20	

Total Feet

95'

Total Holes

190

9. TIH with 9-5/8",53.5# packer and 4-1/2",11.6#, N-80 casing (rental work string) to 5,950' KBM and set packer. NU Frac Valve. Close pipe rams and chain down 4-1/2" casing work string. Monitor 4-1/2" x 13-3/8" annulus during Frac job. Install a pressure relief valve to annulus (set to release any pressure above 500 psi at surface). Pipe and divert any release pressure to flowback tank. Test Lines. Fracture Stimulate the Delaware Sand perfs from 6,018' – 6,640' (OA). Top surface pressure 6,000 psi.

Frac general info:

See-Well Completion - COA

L Acid
500 (25# gel system)

O# Gel

TAY

Weracer

80 BPM

2,000 gals

15% HCL Acid

133,000 gals

Viking 2500 (25# gel system)

3,900 gals

Linear 10# Gel

324,000 lbs

Sand, White 16/30 (1 - 8 ppg)

(Record average treating pressure, rates and job load along with ISIP, 5, 10 & 15 minute readings).SWI

- 10. RD BJ Services. RU flowback equipment. Flowback well @ 0.5 bbl/min rate (30 bbl/hr) the first 12 hrs; then a 1.0 bbl/min rate (60 bbl/hr) the next 12 hrs and then a 2.0 bbl/min rate (120 bbl/hr) until well dies. RD flowback equipment.
- 11. ND frac valve. Unset 9-5/8" packer @ 5,950' KBM. TOH laying down 4-1/2" work string and treating packer.
- 12. TIH with 8-3/8" bit on 2-7/8" tubing (or original drillout string) to make clean out run. Check and clean out (if necessary) to insure PBTD is at least 50' above CIBP set in step 7 using clean 2% KCL. TOH. Close blind rams and change out 2-7/8" pipe rams for 3-1/2".
- 13. MI & unload ~ 6,100', 3-1/2", 9.3#, J-55 lined tubing. PU and TIH w/ Weatherford 9-5/8", 53.5# x 3-1/2" nickel coated/IPC pkr, on/off tool, 2.31" profile nipple & 3-1/2" tubing to 5,950' KBM.

14. RU reverse unit. Load hole and circulate 13-3/8"/9-5/8" csgs x 3-1/2" tbg annulus with packer fluid (2% KCL containing corrosion inhibitor).

Set 9-5/8" packer @ ~ 5,950' KBM.

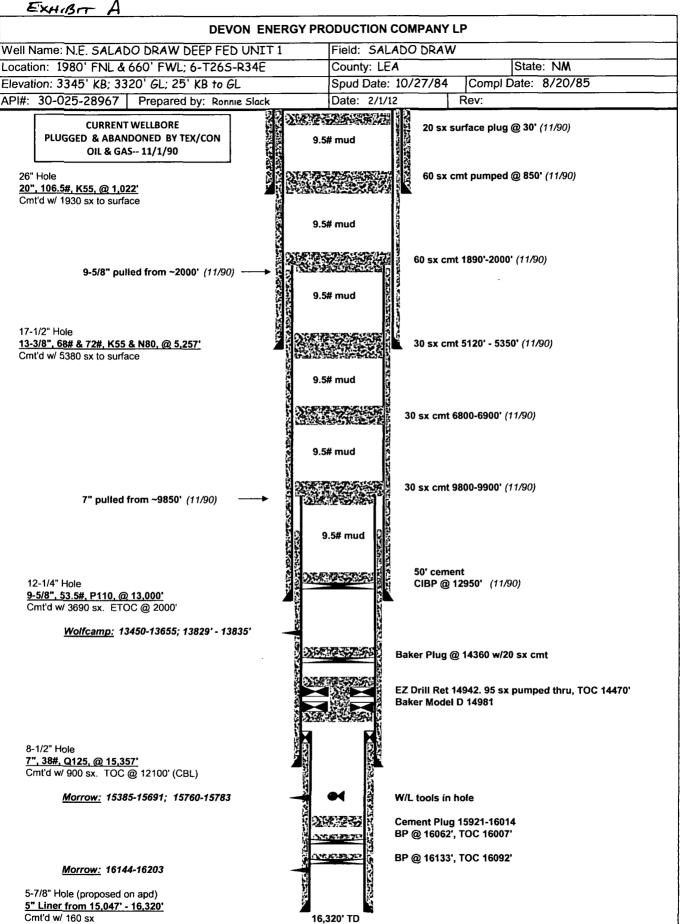
15. Set 9-5/8" packer @ ~ 5,950' KBM.

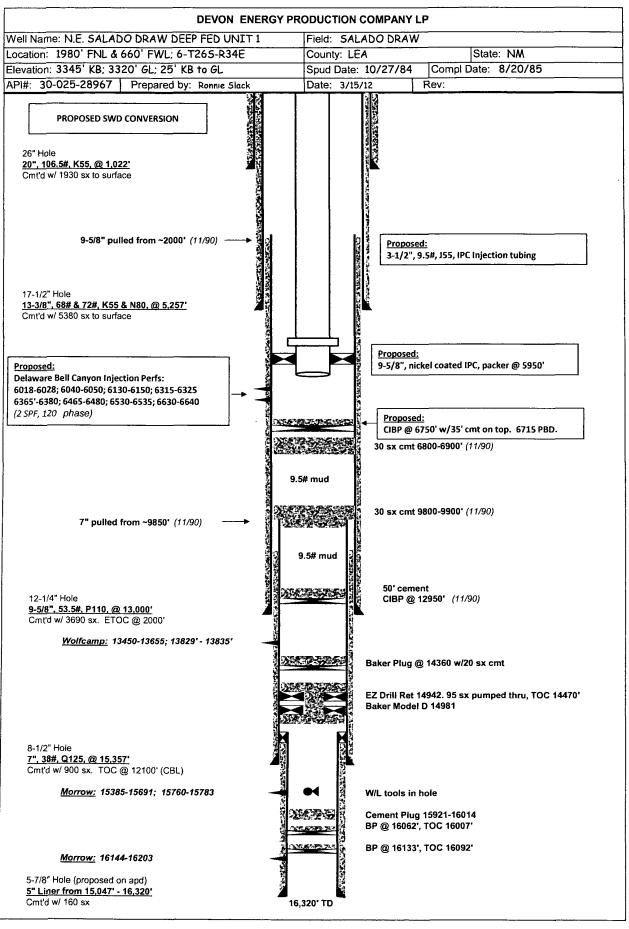
Ttem # 2

Notify the NMOCD office prior to performing mechanical integrity test & step-rate injection test (if required). Perform and chart record MIT & step rate test. RDMO

Note: Once NMOCD approval is received for injection and the injection facility has been built. Hook up well for injection. Anticipated maximum allowable surface pressure is 1,203 psig (6,018' top perf x 0.2).

Final
See COA "Well with a Packer-Operations"





NOTES REGARDING BLOWOUT PREVENTERS

RE-ENTRY PROGRAM

Devon Energy Production Company, LP **NE Salado Draw (Deep) Federal 1**

Surface Location: 1980' FNL & 660' FWL, E, Sec 6 T26S R34E, Lea, NM Bottom Hole Location: 1980' FNL & 660' FWL, E, Sec 6 T26S R34E, Lea, NM

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

