Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Thursday, October 26, 2006 1:30 PM
To: 'shannon.klier@boldenergy.com'
Cc: Ezeanyim, Richard, EMNRD; Wink, Gary, EMNRD; Sanchez, Daniel J., EMNRD
Subject: RE: Bold Energy ARU #4 - Approved Injection Permit

Tracking:

Recipient	Read
'shannon.klier@boldenergy.com'	
Ezeanyim, Richard, EMNRD	Read: 10/26/2006 2:38 PM
Wink, Gary, EMNRD	
Sanchez, Daniel J., EMNRD	

Shannon:

Item 1:
The wellbore diagram which you attached shows that you are now adequately cemented. I'm sure the CBL will confirm.

Item 2:
You can do this after stimulating. The best test of hydrocarbons will be after stimulating.

Item 3:
The OCD inspector will witness this and let you know what to pressure the annulus to. I think they do 500 psi for 30 minutes but sometimes 15 minutes.

Please consider this email as written confirmation that you have completed the required cementing work.

The other ordering paragraphs in SWD-1049 still apply, our Hobbs inspectors are best to talk to about those requirements.

Regards,

William V. Jones Engineering Bureau Oil Conservation Division Santa Fe

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From: Ezeanyim, Richard, EMNRD
Sent: Thursday, October 26, 2006 10:27 AM
To: Jones, William V., EMNRD
Subject: FW: Bold Energy ARU #4 - Approved Injection Permit

FYI

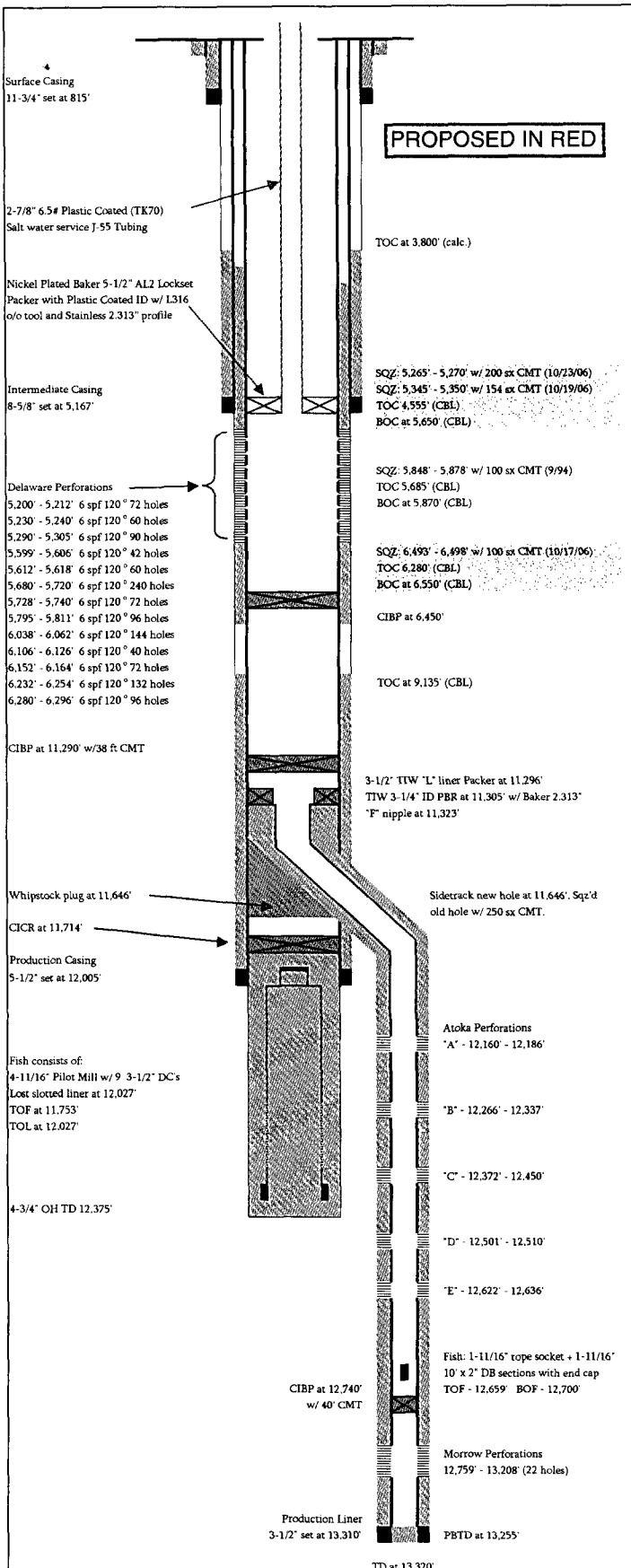
From: Shannon Klier [mailto:]
Sent: Wednesday, October 25, 2006 2:10 PM
To: Ezeanyim, Richard, EMNRD
Cc: 'Denise'
Subject: Bold Energy ARU #4 - Approved Injection Permit

Mr. Ezeanyim,

BOLD ENERGY, LP — ARU #4

WI: 50.0%
Elevation: 3,550'
KB: 13'
Meas. TD: 13,320'
TVD: 13,320'
PBD: 13,255' (FC)
Zone: Atoka

NRI: 42.5%
API: 30-025-21037
Surface Location 990' FNL & 2310' FEL
Legal Description Section 4 - T24S - R34E
Field: Antelope Ridge
County: Lea County
State: New Mexico



Casing	Hole	Weight	Grade	Top	Bottom	Burst	80% Burst	TOC
Conductor								
11-3/4"	15"	42#	H-40/J-55	0'	815'	1,980	1584	Surface (circ)
8-5/8"	11"	32#	J-55	0'	5,167'	3,930	3144	3,800' (calc)
5-1/2"	7-7/8"	17#	N-80/J-55	0'	12,005'	5,320	4256	9,135' (CBL)
3-1/2"	4-3/4"	9.3#	N-80	11296'	13,320'	10,160	8128	11,296' (circ)

Date	Event
12/8/1964	Spud
2/4/1965	Original completion in Atoka OH from 12,005' - 12,375'. CAOF = 30 MMscfd
	Four point test results

Time (hrs)	Choke	Rate (mcfd)	Cond (bbls)	GLR	FTP
2	10/64	4,516	8.8	42,873	4,155
2	13/64	5,539	11.7	39,521	4,090
2	16/64	6,781	15	37,591	3,974
2	19/64	9,568	22.5	35,004	3,717

3/8/1966	BHP bombs. Survey showed 5,162 psi at 12,250'. Corrected to 5,115 psi at 11,826'
9/5/1968	Letter from Shell to NMOCD reporting 1,300 bwpd and 1,000 Mscfd
10/1/1972	Deepen to Morrow. SITP 2,200 psi. Killed with 10# brine. POOH with LSA. Try to fish 4" slotted liner. Could not pull liner. Left fish in hole + 1-11/16" KR pilot mill and 9 3-1/2" DC's. TOF at 11,753' Sqz from 11,714' - 12,375'. Set whipstock and sidetracked original hole at 11,646' with 4-3/4" bit. Set 3-1/2" casing at 13,320' with TOL at 11,296'. RIH with 2-7/8" tbg and perf with 2" tubing guns: Morrow: 12,759; 12,762'; 12,763'; 12,780'; 12,781'; 12,789'; 12,790'; 12,792'; 12,958'; 12,961'; 12,964'; 12,967'; 12,970'; 12,972'; 12,975'; 12,977'; 13,023'; 13,025'; 13,182'; 13,184'; 13,206'; 13,208' (22 holes) 16 hour SITP = 6,600 psi. Flowed 24 hours at 750 psi - 637 Mscfd. Acidized Morrow with 2K gal 20% HCL w/ nitrogen.
2/1/1973	Flowing Morrow at 600 psi at 12 bopd, 0 bwpd and 750 Mscfd. Frac'd Morrow with 10K gal 50# linear gel pad and 15K gal 1.0 ppa slurry with 20/40 sand + 1K gal 15% HCL acid w/10 BS - then repeated. All fluid conatined 300 scf/bbl N2. Averaged 8.3 bpm at 7,700 psi. ISIP = 5,700 psi. 15 min SIP = 5,000 psi.
4/1/1973	Flowing Morrow at 600 psi at 4 bopd, 8 bwpd and 765 Mscfd after frac.
3/1/1977	Flowing Morrow at 267 Mscfd, 4 bopd, 1 bwpd. Ran PBU test. BHP = 4,561 psi. Tagged w/ WL at 13,191'. Skin damage reported in PBU analysis.
10/1/1991	FTP = 200 psi. Swabbed 4 runs and recovered 6-10 bbls black water.
8/1/1994	Plug back from Morrow to Atoka. Set CIBP over Morrow. Left WL fish in hole. Located hole in casing at 5,848' - 5,878' and squeezed off. Perforated the Atoka as follows with 2" tubing guns. 4 spf, 60 deg phasing, 389 holes total "C" 12,372' - 12,382'; 12,401' - 12.403'; 12,408' - 12.414'; 12,417' - 12,423'; 12,426' - 12,434'; 12,442' -12,450' "D" 12,501' - 12,510'; 12,514' - 12,516'; 12,552' - 12,566'; 12,576 - 12,584'; 12,591' - 12,601' "E" 12,622' - 12,627'; 12,630' - 12,636' Noted slight blow on tubing after perforating 12,552' - 12,584'. Overnight SITP = 1,190 psi. Flowed well 7.5 hrs Recovered fluid for first two hours with FTP 300 to 600 psi.
9/24/1994	SI waiting on compressor. SITP from 9/24 to 9/30 - 1,700 psi to 3,850 psi.
10/13/1994	Begin gas lift. Ran flowing gradient survey showing BHFP at 12,513' is 896 psi - flow coming from bottom GLV at 11,297'
11/29/1994	RIH w/ CT. Spotted 10 bbls 7-1/2% MSR to bum perfs. Pumped 0.3 bpm at 4,400 psi. ISIP = 3,850 psi. 15 min SIP = 805 psi. Pull above perfs and pump 18 bbls 7-1/2% MSR. Displace acid while reciprocating CT. Reverse out.
12/3/1994	Well flowing on gas lift. No net gas production after 3 days.
12/17/1994	Perforated Atoka "B" 12,316' - 12,337' w/ 2" tubing guns. Well went from vacuum to slight blow in 10 minutes. Started gas lift. Fluid to surface in 1 hour. Flowing 6 hours with 25 bw, 570 Mcf. From 12/18/94 to 1/6/95 gas increased from 0 to 131 Mscfd and from 0 to 158 bwpd.
1/8/1995	SITP = 250 psi, SICP = 1,240 psi. Perforate Atoka "A" 12,160' - 12,162'; 12,168' - 12,176'; 12,181'; 12,186'; 12,266' - 12,270'; 12,272' - 12,274'; 12,281' - 12,284'; 12,286' - 12,289'; 12,291' - 12,303' 2" tubing guns, 2 spf w/180 deg phasing. Tubing pressure increased to 500 psi after 2nd run. FL at 2,450'. TP increased to 600 psi after 3rd run. Final SITP = 650 psi. CP = 1,240 psi. From 1/10/95 to 1/22/95 rate increased from 119 to 157 Mscfd and decreased from 120 to 105 bwpd.
3/1/1995	BHP = 5,518 psi from 72 hour BHP buildup.
9/11/1996	Spotted 60 bbls of 15% MSR 100. Acidized Atoka perfs. Formation broke at 4,960 psi at 2.5 bpm. Max pressure = 6,150 psi at 8.0 bpm. ISIP = 1,000 psi. 15 min SIP = 160 psi.
9/12/1996	SITP = 675 psi. Swabbed - SFL 500' FFL 2,000'. Well kicked off after 4 runs. 16/64" CK at 775 psi. SI for evaluation. 14 hour SITP = 1,200 psi.
9/15/1996	TA'd well with CIBP over Atoka.
4/11/2002	Casing integrity test performed and witnessed by BLM.
3/1/2006	Re-establish Atoka production: Cut over and retrieved CIBP. Polished PBR at 11,296'. Ran GYRO survey showing BHL at 12,659' is 154.7' at 102.7 degrees. Ran seal assembly on 3-1/2" work string. Shut in well.
3/21/2006	4 day SITP = 1,250 psi. Frac'd Atoka (12,160 - 12,636') with 1,930 bbls Slickwater & 11,981 lbs 20/40 CarboProp at a pump rate of 22 - 30 bpm and 7,883 to 8,530 psi. ISIP = 3,650 psi. Opened to test tank on 32/64" CK. First 14 hours of flowback recovered 505 bw with FTP of 240 psi on 34/64" CK. Recovered over 100% of frac load by second day of flowback.
3/24/2006	MIRU test seperator and continue flowback. 275 psi on 32/64" CK 130 Mscfd and 840 bwpd
3/25/2006	245 psi on 28/64" CK 121 Mscfd and 1,017 bwpd
3/26/2006	220 psi on 28/64" CK 93 Mscfd and 884 bwpd
3/27/2006	200 psi on 28/64" CK 103 Mscfd and 1,086 bwpd
3/28/2006	Final reading 200 psi on 28/64" CK 103 Mscfd and 1.008 bwpd Ran SLB production log. Set down at 12,322'. Log showing all flow coming from below 12,322' (no spinner data)
3/29/2006	Ran impression block - sand impression. Made 1' in 3 bailer runs. SI and let build over night.
3/30/2006	Open to test tank and flow well overnight.
3/31/2006	Ran in with bailer. No progress in 6 bailer runs. SI well.
4/3/2006	SITP = 2,750 psi. Flowed well to test tank. Pull 3-1/2" work string. Set 5-1/2" CBP at 11,290' w/38' CMT.
8/19/2006	Ran CBL to identify cement tops in 5-1/2" casing string.
10/17/2006	Performed squeeze work to isolate above and below Delaware formation. Casing tested to 625 psi after all squeeze work. Good test.