Form 3160-5 (August 2007)		UNITED STATES PARTMENT OF THE IN UREAU OF LAND MANAC	ITERIOR	ocd Hobbe	,0CD	OMB NO	APPROVED D 1004-0135 July 31, 2010	
		NOTICES AND REPOR s form for proposals to ( l. Use form 3160-3 (APD		2110		<ol> <li>Lease Serial No. NMNM68821</li> <li>If Indian, Allottee o</li> </ol>	r Tribe Name	<u> </u>
<u> </u>		PLICATE - Other instruct				7. If Unit or CA/Agree	ment, Name a	and/or No.
1 Type of Well	[					8. Well Name and No. PALOMA 30 FED	ERAL 02	
2. Name of Ope	a Gas Well Oth crator EAKE OPERATING	Contact		NGER		9. API Well No 30-025-37413-0	0-S1 /	
3a Address	, ,		3b. Phone No	(include area code	:)	10. Field and Pool, or		
	MA CITY, OK 73154		Ph: 405.93			BellLake	AtoKa	<u>Ga</u>
Sec 30 T2	3S R34E NWSE 24 N Lat, 103.508441	C, R., M., or Survey Descryption, 30FSL 2420FEL W Lon	,			11. County of Parish, LEA COUNTY,		
	12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF	NOTICE	, REPORT, OR OTHE	R DATA	
TYPE OF	SUBMISSION			ТҮРЕ О	F ACTIO	Ń		
Notice o	f Intent					luction (Start/Resume)		
□ <sup>Subsequ</sup>	ent Report	□ Alter Casing □ Casing Repair		cture Treat v Construction		lamation omplete	U Well In Other	ntegrity
🗖 Final Ab	andonment Notice	Change Plans		g and Abandon	_	porarily Abandon	•	
.•		Convert to Injection	🛛 Plug	g Back	□ <sup>Wat</sup>	er Disposal		
		P FORMATION. PLETION PROCEDURE A	S WELL AS	THE WELL BO	RE SCHI	EMATIC.		
		SI	EE ATT	ACHED F	OR			
, ,		C	ONDITI	ONS OF A	APPR(	OVAL		
14 Thereby cer	rtify that the foregoing is	Electronic Submission #1 For CHESAPE	AKE OPERAT	ING INC, sent to	o the Hobb	)S		
Name (Print	Comm ed/Typed) LYNDEE	itted to AFMSS for process SONGER	ing by DEBO			2011 (11DLM0697SE) COMPLIANCE ANALY	ST	
Signature	(Electronic S			Date 08/12/2				
	· · · · · · · · · · · · · · · · · · ·	THIS SPACE FO	R FEDER	AL OR STATE	OFFICE	PROVED		
Approved By	(BLM Approver Not	Specified)		Title			Date	01/13/20
Conditions of app certify that the app	proval, if any, are attache	ed. Approval of this notice does uitable title to those rights in the	not warrant or subject lease	Office Hobbs		JAN 1 3 2012 Mark		
Title 18 U.S.C. S States any false	ection 1001 and Title 43 , fictitious or fraudulent	U.S.C. Section 1212, make it a statements or representations as	crime for any p to any matter v	erson knowingly an within its jurisdiction	nd willfully n PE	MERICEN ANY DEPLOMENT	r agency of th .R	e United
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				/	JAN	LI LUIL	JA	

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**Wolfcamp Recompletion** 

#### Well Data

Surface Casing:	9-5/8″ 40# J-55 @	<u>ي</u> 5,085,
Prod. Casing:	7" 26# P-110 @ 1	1,974' ·
Liner:	4.5" 13.5# P-110	@ 11,747' - 13,868'
TOC:	5,570' (WL)	
TD:	13,870′	
PBTD:	12,465' (CIBP w/	35' cmt)
Elevation:	3,634' KB	3,608' GL
WI / NRI (%):	95.00/ 71.25	

DV Tool: 7,499'

Proposed Perforations:	
Upper Wolfcamp (Sand)	11,548' – 51' (4 SPF)
	11,563' - 66' (4 SPF)

#### **Tubular Specifications**

SIZE	WEIGHT	GRADE	BURST	COLLAPSE	VIED	DRIFT (ID/OD)	CAPACITY (FT//GAU)	CAPACITY (FT./BBL)
2-7/8"	6.5#	N-80	10,570 psi	11,160 psi	145K	2.347" / 3.668"	4.1135	172.76
4.5″	13.5#	P-110	12,410 psi	10,670 psi	338K	3.795" / 5.000"	1.5950	66.99
7"	26#	P-110	9,960 psi	6,210 psi	693K	6.151" / 7.656"	0.6223	26.13
9-5/8″	40#	J-55	3,950 psi	2,570 psi	520K	8 679" / 10.625"	0.3140	13.18

#### **Procedure**

- 1. Safety is the highest priority. Hold wellsite safety meetings prior to each significant operation. Review critical parameters and objectives as well as emergency action plans.
- Set 13 frac tanks and fill w/ ~5,700 bbls of fresh water. Obtain water samples and perform QA/QC analysis as per Chesapeake Energy Guidelines and Specifications

#### Total volume for frac job is 4,381 bbls

- MIRU WOR. NU BOP. RIH w/ 2-7/8" tbg. Spot cement plug (Class H) from 12,074' 11,627'. WOC and tag plug (Tag at 11,650' or shallower). ND BOP.
- 4. NU remainder of 7-1/16", 10K, frac tree as follows (from bottom to top). Utilize nipple up crew and hydraulic tools. Test to 9,000 psi. RU and test 10K flowback equipment with manifolds, flowlines to pit, tank, separator, and sand separator. RU a pop-off valve on the 9-5/8" casing valve and plumb into a line running to the pit. Leave the valve on the 9-5/8" casing open.
  - A. 7-1/16", 10K, Full Opening, Manual Frac Valve
  - B. 7-1/16", 10K, Full Opening, Hydraulic Frac Valve
  - C. 7-1/16", 10K, Cross With 2-1/16", 10K Wing Valves
  - E. 7-1/16", 10K, Full Opening Swab Valve
- PU 3-3/8" perforating guns loaded w/ 4 SPF @ 60° phasing (0.39" EH or less). RiH correlating and shoot Wolfcamp. POOH. RDMO wireline.

Formation	Zone	Perforations	manal	SPE	Total Shots
Wolfcamp	11,542' - 54'	11,548' – 51'	3′	4	12
Wolfcamp	11,556' 69'	11,563' 66'	3′	4	12
Totals:			6'		24

6. RU Pump Company. Hold safety meeting with all personnel on location. Review procedure and discuss critical parameters (Pressures, volumes, rates, contingency plans, etc.). Rig up backside pump and test lines to 9,000 psi. Pressure up on the 7" x 9-5/8" annulus to 1,000 psi and monitor throughout the job. Set electronic kills at 8,000 psi. Test equipment and lines to 9,000 psi.

annulus open to formation



- 7. Frac the Wolfcamp via the casing as follows and according to the stimulation recommendation and procedure. Frac is designed for 40 BPM and 5,000 pounds of 100 Mesh, 80,000 pounds of 30/50 white and 60,000 pounds of 20/40 resin coated. Maximum treating pressure is 6,972 psi (70% of 7" 26# P-110 max = 6,972 psi).
- 8. Flush 1 bbl short of top perforation based on in-line densiometer. RDMO Pump Company.
- 9. MIRU WL. PU JB. RiH to bottom of Wolfcamp perforations at 11,566'. POOH.
- 10. PU & RIH w/ the following:

On/Off Tool w/ 2.313" PN 7" Pkr 10' 2-7/8" pup jt 2.205" XN nipple 2-7/8" x 3-1/2" crossover 10' 3-1/2" pup jt Ceramic disc sub WL re-entry guide

11. Set packer +/- 50' above top Wolfcamp perforation at 11,548'.

12. MIRU WOR. NU BOP. PU overshot for On/Off tool and RIH on 2-7/8" tbg Latch onto pkr Space out.

- 13. Put on hanger. Circ pkr fluid. Test annulus to 1,500 psi.
- 14. Install BP valve, land hanger with 12k compression on pkr
- 15. ND BOP's and frac valve. NU 2-9/16" 10k tree. Test to 10k.
- 16. Pull BP valve. Load tbg and test to 6,000 psi. Bleed off pressure.
- 17. MIRU WL. PU 1-3/4" muleshoe bailer. RIH and break disc. POOH.
- 18. PU 2.313 XN lock (with no V-packing), perf sub, shock absorber, 2 1.25" sapphire pressure gauges.
- 19. Set gauges to record in 10 sec intervals for 90 days and turn gauges on.
- 20. RIH w/ gauges and set in XN nipple and jar off. POOH.
- 21. Flow well back. Obtain samples every hour for the first twenty-four (24) hours of flowback for water analysis Take samples every twenty-four (24) hours thereafter, until the well stops producing load water
- 22. Turn well over to production.

#### Contact List

Completion Superintendent: Production Superintendent: Engineer: District Manager: Mark Mabe Chip Roemisch Shannon Glancy Jay Stratton Office: (432) 687-2992 / Mobile: (432) 556-6067 Office: (432) 687-2992 / Mobile: (432) 556-7069 Office: (405) 935-8109 / Mobile: (405) 415-5299 Office: (405) 935-6164 / Mobile: (405) 831-3994



## Proposal Schematic

### PALOMA 30 FEDERAL 2



ISE COLO E DATA FOR JESINGLE ENDED BY EL

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Page 1/1

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# Paloma 30 Federal 2 30-025-37413 Chesapeake Operating Inc. January 13, 2012 Conditions of Approval

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

Work to be completed by June 30, 2012.

- 1. Surface disturbance beyond the originally approved pad must have prior approval.
- 2. Closed loop system required.
- 3. Operator to have H2S monitoring equipment on location.
- 4. 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.
- 5. Operator cannot maintain 1000 psi in the 7" x 9-5/8" casing as the annulus is open to the formation below the 9-5/8" shoe. Electronic kills shall be set to meet maximum fracture treating pressure in Step 7 (6972 psi).
- 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. Subsequent sundry required detailing work done and completion report for new zone.

WWI 011312

iloma 30 Federal 2 Pump Schedule - Wolfcamp (Sand	Recompletion
0 Federal 2	(Sand
2	0 Federal 2

	Stage	Fluid Vol	Fluid Vol	Shurry Rate	Prop Conc	Stg Sel Vol	Cum Set Vol	Stage Time	Time Remaining	Fluid Type	Proppant
	No.		(bbk)	(them)	(3dd)	(198)	(Ibs)	(min)	(min)		Type
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	5	2:050	119	ç		a	¢	2.98	104	Linear Gei	
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	80	18,500	4:0	1	,	0	7500	1: 61	70	6	
	ðs I	15 000	357	\$	0.50	2,500	15300	8 93	59		30/50 White
	10	20,200	476	7	81	20,000	35003	11,90	50		
	13	25 28	595	\$	28	50,000	85000	34,88	38	200100	30/50 White
	14	20,000	476	\$	3.8	200,030	145000	11.90	23		20/48 Resin Coated
	15	18,522	175	ç		a	145300	1: 85	11	Linear Gel	
End Time		Shur.n						25.00			
	sum	154,022	4,381			145,000	145,000	117			

		Top perf:	21 5-28 #		Wc	Wolfcamp (Sand) Perforations	orations	
One Stage Totals	*¢	7" 26# P-110 cap;	acasa bby/th	Cluster	Interval	Totai Footage	39F	Total Shots
Actual Needed				1	11,548' - 51'	<b>5</b> 7	*	12
Frac Tanks - 3 958 23		Vol-Top Perf ~	(47 PD)	2	11,363' \$č	3	\$	1 12
	_	Flush =	idd Ist			\$		34 24
Prop'd Ruid Vol 20,030 1,905								
	Estimate	Estimated Pump Time =	1hr 5776in	<b></b>				
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Wellbore Transit Time	Wellbore Transit Time	nsit Time	-	, \$.,.		Equiv ID (m) Plud		
BPM Minutes	Wd9	Minutes	Flow	Flow Rate: In BPM		1.4 26M	w	

	sit Time	Minutes	22.1	20.1	35.4	170	15.8	· 14.7	13.8	13.0	12.3	11.6	11.0
Legend Not Calculoted Cals wheted	Wellbore Transit	BPM	, 20	. 22	\$\$	25	80	30	32	32	35	38	. 40

nsit Time	Minutes	11.0	135	30.0	9,5	83	8) 8)	582	23	57	7.6	¥.L
Wellbore Transit Time	BPM	\$\$	42	¢3	46 85	58	8	52	컔	<b>26</b>	58	8

sit Time	Minutes	11.0	205	10.0	9.5	83	83	582	\$3	2.5	7.5	7,4
Wellbore Transit Time	BPM	8	42	4	\$\$	83	8	52	3	26	58	8

			*	IV/pol) Precision Pre-Length (HE			57 0	948	137.0	1 531	222.6	235.2	340.9	339.4	480.5
		Equiv ID (m) Fluid	6 276 Wing 2500	Flad Dennity (Itv/ps/	843	Fretton Pressure (psi)	10 00	15.00	20 00	25 68	30.52	88.00 88.00	40.02	48 00	50.00
Ston Pressures for Common Plaie	<ul> <li>Flow Rate</li> <li>Cande</li> <li>Cande</li> <li>Ratio</li> </ul>		Flow Rake 10 BPM		Step By 5.00 BPM	Flow Bale (SPM)			•				-		••••

# Paloma 30 Federal 2 Sec. 30-T23S-R34E, 2430 FSL & 2420 FEL Lea County, NM API #3002537413 CHK Prop #819658





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