

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

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. NMNM 68821
2. Name of Operator CHESAPEAKE OPERATING, INC ATTN: LINDA GOOD		6. If Indian, Allottee or Tribe Name
3a. Address P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496	3b. Phone No. (include area code) 405-767-4275	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2430 FSL 2420 FEL, SEC 30-T23S-R34E		8. Well Name and No. PALOMA 30 FEDERAL 2
		9. API Well No. 30-025-37413
		10. Field and Pool, or Exploratory Area BELL LAKE; MORROW, MID (GAS)
		11. County or Parish, State LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

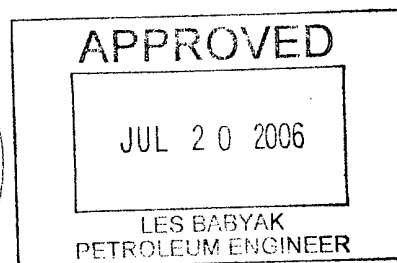
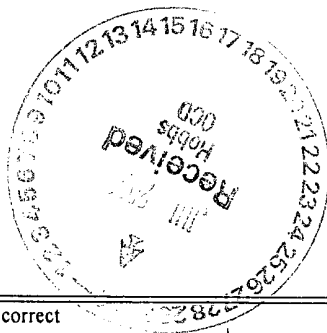
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> 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 type="checkbox"/> Recomplete	<input type="checkbox"/> Other Install Gas Lift
	<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 recompleat 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Chesapeake, respectfully, request permission to install a gas list on this well per the attached procedure.

BLM NATIONWIDE BOND #NM2634.

(CHK PN 819658)



14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) LINDA GOOD		Title PERMITTING AGENT
Signature <i>Linda Good</i>	Date 06/09/2006	

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ 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.	Title _____ Office _____	Date _____
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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.

(Instructions on page 2)

GWV

**Paloma 30 Federal #2
Gas Lift Installation
Lea County, New Mexico**

GENERAL INFORMATION

Location: 2430' FSL & 2420' FEL, S30 – T23S - R34E

API No.: 35-025-37413

AFE No.: 140869

WELL INFORMATION

<u>String OD</u>	<u>Weight & Grade</u>	<u>Depth</u>	<u>ID</u>	<u>Drift</u>	<u>Burst</u>	<u>TOC</u>
13-3/8"	48# H40 STC	0' – 870'	12.715"	12.559"	1730	0'
9-5/8"	40# J55 LTC	0' - 5085'	8.835"	8.679"	3950	0'
7"	26# P110 LTC	0' - 11974'	6.276"	6.151"	9960	~5570'
4-1/2"	13.5# P110 LTC	11747' - 13868'	3.920"	3.795"	12410	11747'

Atoka perfs: 12556 – 67'

TD/PBTD: 13870' / 13210'

Installation Procedure

1. Pre-workover: Set compressor and water tank. Lay SWD line and make requisitions facility modifications and tie-ins for gas lift operation.
2. MIRU Service Rig and requisite equipment. NU BOP.
3. Kill well if required with 2% KCL to maintain well control. Release and POOH with packer and 2-3/8" P-110 tubing.
4. RIH with 4-1/2" Baker Hornet packer and 2-3/8" tubing as follows: Re-entry guide, 4' sub, 'XN' nipple, 10' sub, 'X' nipple, 4' sub, packer, on/off tool w/ 'X' profile nipple. Space out with the EOT ~ 12500' whereby Mandrel #1 (S/O valve) is at ~ 11700'. Install mandrel #'s 2 – 13 at 11200', 10600', 10000', 9400', 8800', 8200', 7600', 7000', 6300', 5550', 4500', and 3000'. Space out and set packer. ND BOP, NU wellhead.
5. RDMO PU.
6. Tie in annulus to discharge side of compressor. Bring compressor on-line and slowly ramp rate to ~ 150 MCFPD. As top valve opens and well begins to unload, slowly increase gas injection rate to ~ 300 MCFPD. As deeper valves open and well continues to unload and flow, operating parameters will be adjusted accordingly. Maximum injection pressure 1200#.

Schlumberger

Schlumberger Gas Lift Technology

Company: CHESAPEAKE
Field: BELL LAKE
Lease: PALOMA 30 FED
Well: #2
County: LEA N.M.
Date: 12-Apr-06
Designed by: BILL CARROLL
Designed for: ANDREW McCALMONT
Field Contact
Approx. Del

Mandrel Spacing

Telephone

TVD	Mandrel Number	TRO	PORT SIZE
3000	13	1150	3/16"
4500	12	1130	3/16"
5550	11	1110	3/16"
6300	10	1090	3/16"
7000	9	1075	3/16"
7600	8	1060	3/16"
8200	7	1050	3/16"
8800	6	1040	3/16"
9400	5	1030	3/16"
10000	4	1020	3/16"
10600	3	1010	3/16"
11200	2	1000	3/16"
11700	1	S/O	3/16"

Notes to Gas Lift Shop
2 3/8 x 1 1/2" P110 MANDRELS AB MOD.
SJ 20 1 1/2" 3/16" PORT
new equipment
3/16" PORT SCREENED ORIFICE

BOOTS:903-597-9800; (M)570-0091 * FREDDIE:903-597-9801; (M)570-6221 *JEFF:903-597-9801;

Schlumberger

Schlumberger Gas Lift Technology

PRESSURE VALVE CALCULATION SHEET

Schlumberger

COMPANY: CHESAPEAKE Field: BELL LAKE Lease: PALOMA 30 FED County: LEA N.M. WELL: #2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
VLV #	MD	TVD	Tv	TCF	Port	R	1-R	PPFE	Pt Min.	Pt Max.	PPE	Cp @ Depth	Pbt/Pvc @ Depth	Pb @ 60	Calculated	TRO @ 60 degrees Set
13		3000	126	0.876	3/16"	.038	.962	.040	580	920	14	1290	1263	1106	1150	1150
12		4500	136	0.860	3/16"	.038	.962	.040	800	1100	12	1280	1262	1085	1127	1130
11		5550	144	0.847	3/16"	.038	.962	.040	940	1180	10	1270	1257	1065	1107	1110
10		6300	150	0.838	3/16"	.038	.962	.040	960	1180	9	1260	1249	1046	1087	1090
9		7000	154	0.832	3/16"	.038	.962	.040	1020	1180	6	1250	1241	1033	1073	1075
8		7600	158	0.826	3/16"	.038	.962	.040	1050	1180	5	1240	1233	1018	1058	1060
7		8200	162	0.820	3/16"	.038	.962	.040	1100	1180	3	1235	1230	1009	1049	1050
6		8800	166	0.814	3/16"	.038	.962	.040	1160	1180	1	1230	1227	1000	1039	1040
5		9400	171	0.807	3/16"	.038	.962	.040	1180	1180		1225	1223	988	1027	1030
4		10000	175	0.802	3/16"	.038	.962	.040	1220	1180	-2	1220	1220	978	1017	1020
3		10600	179	0.796	3/16"	.038	.962	.040	1260	1180	-3	1215	1217	969	1007	1010
2		11200	183	0.791	3/16"	.038	.962	.040	1300	1180	-5	1210	1213	960	998	1000
1		11700			3/16"											S/O

VARIABLES DESCRIPTION

Pp min = Tubing pressure; psi @ Valve depth @ Transfer Point
 Pp max = Highest Tubing Pressure that could exist at the valve.
 R = Ap/Ab; Ap = Area of the port Ab = Area of the bellows.
 Cp @Depth = Casing Pressure @ Depth of Valve; psi #NAME?
 PPFE = Prod. Press. Effect Factor - PPE = Prod. Press. Effect
 Pvc = Pressure Valve Close
 Pbt = Bellows Pressure @ Depth of Valve; psi
 TRO = Test Rack Opening; psi
 TCF = Temperature Correction Factor
 Tv = Temperature @ Depth of Valve

FORMULAS

- 9.) PPFE = [(Ap/Ab) / (1-(Ap/Ab))]
 12.) PPE = (Pp max - Pp min) x PPFE
 14.) Pbt or Pvc = [(Cp @ Valve x (1-R)) + (Pt min x R)]
 15.) Pb @ 60 = (Pvc x TCF)
 16.) TRO = PB @ 60 / (1-R)

DESIGNED PRODUCTION RATE:

700 - 100 BBL / DAY

DESIGNED GAS INJECTION:

300 - 500 MCF

Notes to Gas Lift Shop

2 3/8 x 1 1/2" P110 MANDRELS AB MOD

SJ 20 1 1/2" 3/16" PORT

new equipment

3/16" PORT SCREENED ORIFICE

Type	Port	R	1 - R	PPFE	Valve size
SJ-20	1/4"	0.067	0.933	0.072	1 1/2"
SJ-20	3/16"	0.038	0.962	0.04	1 1/2"
SJ-40	3/16"	0.094	0.906	0.104	1"

Tubing Size, Grade & Thread		Casing Size & Weight		Perforations		PKR Depth	Static Bottom Hole Pressure PSI		Unloading Gradient	
2 3/8, P110 AB MOD.		11" 26#		12555-567		12445	4277		0.5	
Max. Kickoff Pressure PSI	Max. Operating Pressure PSI	Tubing Pressure		Formation GOR	PI	SBHT	FST	Water %	Gas Gravity	Oil Gravity
1200	1200	100				182	114	100	0.6	

COMMENTS: DESIGNED TO COVER 700 BBL/DAY AND UNDER, VALVED TO 4 1/2" LINER

DESIGNED BY: BILL CARROLL

APPROXIMATE DELIVERY DATE

DESIGNED FOR: ANDREW McCALMON

DATE: 4/12/06

FIELD CONTACT

Tel

Schlumberger Gas Lift Products & Services

[illegible]

JOB PENDING

DISTRICT 9235035	SALESMAN BILL CARROLL
DATE PREPARED 04/12/06	DATE REQUIRED
EQUIPMENT ORDER NUMBER	
E O PREPARED BY	DATE E O PREPARED
REPAIR ORDER NUMBER	
WELL #: #2	COUNTY LEA N.M.

DELIVERED TO:	FIELD:	LEASE:	WELL #:	COUNTY
	BELL LAKE	PALOMA 30 FED	#2	LEA N.M.

[illegible]