Form 3160-3 (November 1983) (formeriy 9-331C)	i vita i la	L CONS. CUM		SUBMIT IN TA (Other instruction of the state	CATE	Budget Bure Expires Aug	au No. 1004-0134 pust 31, 1985
		F LAND MANAGE					NON AND BREAL NO.
						LC 034711	TTES OR TRIBE NAME
APPLICATIO	ON FOR PERMIT	TO DRILL, DI	EEPEN, C	DR PLUG B			
. TTPE OF WELL		DEEPEN		PLUG BAC		7. UNIT AGREEMEN	TNAME
WELL XX	WELL OTHER		SONB	BONS		8. FARM OR LEASE	MAMB
	leum Operating C	000000			-	Baylus Cade	Federal
ADDRESS OF OPELAT		ompany				#6	
415 W. Wall,	Suite 1000, Mid	<u>land, TX 7970</u>	1			10. FIELD AND POO	
At surface	(Report location clearly an	d in accordance with	any State requ	irements.*)		Teague Simps	
Unit K, 200 At proposed prod.	O' FSL & 1700' F 2018 S 35	WL				11. SBC., T., R., M., AND SURVEY OF	AREA
4. DISTANCE IN MILE	AND DIRECTION FROM NE.	AREST TOWN OR POST	FFICE*			Sec 35, T23	
	E of Jal, New Me	xico				Lea	NM
S. DISTANCE FROM PR LOCATION TO NEAR	SST		6. NO. OF ACE	ES IN LEASE		F ACEES ASSIGNED	
PROPERTY OR LEAS (Also to Degress of 8. DISTANCE FROM FI	irig. unit line, if any)	1700'	520'		40	·	
G. DISTANCE FROM PI TO NEAREST WELL OR APPLIED FOR, ON	. DRILLING. COMPLETED.	300'	9. PROPOSED D 9700 ¹	epth		IT OR CABLE TOOLS	
	whether DF, RT, GR, etc.)		9700	I	Kot	ATY 22. APPROX. DATE	WORK WILL START
3246' G	L					As Soon As	Possible
3.		PROPOSED CASING	AND CEMEN	TING PROGRAM		2	S FO
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	-	TING DEPTH		QUANTITY OF CE	
17-1/2"	13-3/8"	48#, H-40 ST		350' 3	75 sx	circ	
12-1/4" \$19 7-7/8"	<u>8-5/8"</u> 5-1/2"	24,32# J-55 15.5,17# J-5		<u>3000' 5</u>	50 sx		
We propose t Mud Program:	o drill this wel 0' 350'	' & N-80 LTC 1 thru the Mcl 350' 3000'	Spud m	ıd, FW, gel		ee producer. wt. 10-10.2	
	3000'		vis 26-				QQ.
of this well. Approximately be needed for will be aroun	e a 5000 psi Shat Upon receipt of 25 days will be the completion of d November25, 199 Contingency Plan	E the drilling required to d of this well. H4 and Decembe	ydraulic g permit, krill thi Estimat er 20, 19	-operated H we will co s well. And ed project 94, respect	oprodur ommence other 1 start ively.	drilling op 4 days are e and completi Attached is	lling perations. expected to lon dates
	BE PROPOSED PROGRAM : If o drill or deepen directions			rive data on other	ND NOrd	1780	the new productive pths. Give blowout
	1 1 - 1 -			PROPERT	.5	Balau	
BIGNED Voi	My 6	TITLE	Area Er	gingol CO		28 100	9/94
(This space for Fee	deral or State office use)			EFF. DAT		53	
TORIG. S	OD.) RICHARD L. N	IANUS	APPROVAL	EA MANAG	ER		-25-94
CONDITIONE OF APPROVAL (OR CERTIEN EQUITABLE	THAT THE APPLICATIO	N ĐỘẼS NỘT WẠI	AL OR			APPROVAĽ SUBJ GENERAL REQUI	REMENTS AND
LEASE WHI	CH WOULD ENTITLE REPORTIONES THE STATE	E THE APPEIGAN Cor any person know	Windly and	erse Side willfully to make	e to any d	lepartment of age	ncy of the

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Om. 3160-5 Notember 1983) DEDADIMENIT (THE INTERIOR OF INTERIOR OF INTERIOR OF INTERIOR OF INTERIOR OF INTERIOR	Form approved. Budget Bureau No. 1004-0135 Expires August 31, 1985			
Example 1965) DEPARTMENT Ur THE INTERIOR (Other Instructions on re- BUREAU OF LAND MANAGEMENT	5. LEASE DEE LC-06	STATION AND BRELAL NO. 54118		
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals.)	6. IF INDIAN,	ALLOTTER OR TRIBS NAME		
OIL CAS OTREE	7. UNIT AGRE	EMENT NAME		
NAME OF OFFRATOR Plains Petroleum Operating Company	8. FARM OR L	BASE NAME		
ADDRESS OF OPERATOR	-	3 Cade Federal		
415 West Wall, Suite 1000, Midland, TX 79701	9. WBLL NO.			
LOCATION OF WELL (Report location clearly and in accordance with any State requirements."	#6 10. FIELD AN	D POOL, OR WILDCAT		
At surface		Simpson		
	11. SBC., T., I	L. M. OR BLE. AND		
Unit K, 2000' FSL & 1700' FWL				
4. PERMIT NO. 15. ELEVATIONS (Show whether DF. RT. CR. etc.)		5, T23S, R37E		
3246'GR	12. соритт о Lea	DE PARISE 13. STATE		
3. Check Appropriate Box To Indicate Nature of Notice, Report, or O				
NOTICE OF INTENTION TO				
	ENT REPORT OF	· •		
TEST WATER SECT-OFF PULL OR ALTER CASING WATER SECT-OFF		PAIRING WELL		
PRACTURE TREAT	AL'	TEEING CASING		
SHOUTING OF ACIDIZING	j – na AB.	ANDON MENT*		
(Other) (Other) (Nots: Report results Completion or Recompletion or Recompleti	of multiple con	mpletion on Well		
Revision of previously submitted Application to Drill dated 9/19 The revision is made to the location of the well. The previously alternative location (2075' FSL & 1700' FWL) based on existing power requirements it is necessary to move the location south by 75'. T moved and the requested location of the well is:	submitte er lines.	Due to geological		
2000' FSL & 1700' FWL, Sec 35, T23S, R37E	•	:		
The archeological study performed on the new location is submi Sundry Notice.	tted for	record with this		
		SEP		
		IO 42		
		42 VE		
		AN D		
		RS 27		
I hereby certify that the foregoing is true and correct Area Engineer		September 29, 1994		
SIGNED Area Engineer	DATE _	-		
This space for Federal or State office use:				
APPROVED BY TITLE AREA MANAGER	DATE _			

*See Instructions on Reverse Side

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DISTRICT I P. O. Box 1980 Hobbs, NM 88241-1980

DISTRICT II P. O. Drawer DD

Artesia, NM 88211-0719

DISTRICT III 1000 Rio Brazos Rd. Aztec, NM 87410

DISTRICT IV P. O. Box 2088 Sar

State of New Mexico Eners, Minerals, and Natural Resources Department

Form C-102 Revised 02-10-94

Instructions on back

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Submit to the Appropriate District Office State Lease — 4 copies Fee Lease — 3 copies

OIL CONSERVATION DIVISION P. 0. Box 2088 Santa Fe, New Mexico 87504-2088

AMENDED REPORT

1 API Number			² Pool Code			CREAGE D					
AFI NUMDER			58900			l Name					
* Property Co	de	³ Property N			1e	ague, Simp	son			• Well Number	
				BAY	LUS C	ADE FEDE	RAL			6	•
'OGRID No.		* Operator N		- · · · · · · · · · · · · · · · · · · ·						• Elevation	
017805			PLAIN	IS PET	ROLEU	DPERAT	ING COMP	'AN'	Y	3246	51
				" SUI	RFACE	LOCATION					
UL or lot no.	Section	Township	Rang	je	Lot Ida	Feet from the	North/South	line	Feet from the	East/West line	County
К	35	23 SOUTH	37 EAST,	N.M.P.M.		2000'	SOUTH		1700'	WEST	LEA
•	.	"BOTTO	DM HOLE	LOCAT	ION IF	DIFFERE	NT FROM	SU	IRFACE		<u> </u>
UL or lot no.	Section	Township	Rang		*****				Feet from the	East/West line	County
12 Dedicated A	cres 13 Jo	oint or Infill	¹⁴ Consolidati	on Code	15 Order	No.	I			1	1
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PLAINS PETROLEUM OPERATING COMPANY BAYLUS CADE FEDERAL #6 2075' FSL & 1700' FWL, Sec 35 K, T23S, R37E Lea County, New Mexico Lease No. 037411 September 19, 1994

In addition with Form 3160-2, Application to Drill the above well, Plains Petroleum Operating Company submits the following in accordance with BLM requirements.

1. ESTIMATED GEOLOGICAL MARKERS

GL: 3246'

FORMATION	TOP	<u>SS</u>
Penrose	3390'	-144'
Glorietta	4903'	-1657'
Paddock	5015'	-1769'
Blinebry	5258'	-2012'
Tubb	5907'	-2661'
Drinkard	6311'	-3065'
Abo	6393'	-3147'
Devonian	7190'	-3944'
Silurian	7885'	-4639'
Fusselman	8285'	-5039'
Montoya	8650'	-5404'
Simpson	8965'	-5719'
McKee	9330'	-6084
TD	9700'	-6454'

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Plains Petroleum Operating Company Baylus Cade Federal #6 Lea County, New Mexico Lease No. 034711 September 19, 1994 Page 2

2. CASING DETAIL

	CASING SIZE OD	INTERVAL	LENGTH OF INTERVAL	WEIGHT #/FT	INTERVAL WEIGHT	CASING GRADE	JOINT
Surface	13-3/8"	0' - 350'	350'	48#	16,800	H-40	STC
Intermediate	8-3/8"	0' - 1 00'	100'	32#	3,200	K-55	STC
	8-5/8"	100' - 2200'	2200'	24#	50,400	K-55	STC
	8-5/ 8 "	2200' - 3000'	800'	32#	25,600	K-55	STC
Production	5-1/2"	0'- 10 00'	1000	17#	17,000	K-55	LTC
	5-1/2*	1000' - 7500'	6500'	15.5#	100,750	K-55	LTC
	5-1/2*	7500' - 9400'	1900'	17#	32,300	K-55	LTC
	5+1/2 *	9400' - 9700'	300'	17#	5,100	N-80	LTC
Tubing	2-7/8"	0 - 97 00'	9700	6.5#	63,050	J-55	EUE

3. CEMENTING & FLOAT EQUIPMENT DETAIL

WELL DATA	SURFACE	INTERMEDIATE (TD 3000')	PRODUCTION (TD 9700')
Depth	350'	3000'	9700'
Casing Size	13-3/8"	8-5/8"	5-1/2"
Hole Size	17-1/2"	12-1/4"	7-7/8"
Desired Fill	Surface	Surface	Surface
Hole Volume	245 Ft ³	940 Ft ³	1150 Ft ³ , 475 Ft ³
Recommended Volume	490 Ft ³	1410 Ft ³	1325 Ft ³ , 475 Ft ³
DV Tool Depth	N/A	N/A	3000'

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PLA NS PETROLEUM JPER. CO.

Ope	erator:	PPOC			Well	Name: I	BAYLUS CA	DE FED	#6
Pro	ject I	D:			Locat	ion: 20	075' FSL	1700'	FWL
Design Parameters:Design Factors:Mud Weight (10.20 ppg) : 0.530 psi/ftCollapse : 1.125Shut in casing pressure : 1565 psiBurst : 1.10Internal gradient (burst) : 0.008 psi/ft8 Round : 1.75 (J)Annular gradient (burst) : 0.530 psi/ftButtress : 1.60 (J)Tensile load is determined using buoyed weight0ther : 1.50 (J)Service rating is "Sweet"Body Yield : 1.50 (B)									
1	.ength feet)	Size (in.)	Weight (lb/ft		e Join			prift in.)	Cost
1 2 3	100 2,100 800	8.625 8.625 8.625	32.00 24.00 32.00		5 ST&C 5 ST&C 5 ST&C	í	2,200 7	7.875 7.972 7.875	
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)			•	-	
1 2 3	53 1166 1590	2427 1348 2530	9.999 1.156 1.592	1565 1513 417	3930 2950 3930	2.51 1.95 9.41	66.85 64.15 21.61		6.01 J 4.10 J 18.61 J

Prepared by : DJB, Midland, Texas 09-19-1994 Date : Remarks LEA COUNTY, NEW MEXICO Minimum segment length for the 3,000 foot well is 100 feet. SICP is based on the ideal gas law, a gas gravity of 0.15, and a mean gas temperature of 89°F (Surface 74°F, BHT 104°F & temp. gradient 1.000°/100 ft.) Surface/Intermediate string: Next string will set at 3,000 ft. with 8.80 ppg mud (pore pressure of 1,371 psi.) The frac gradient of 0.700 at the casing seat results in an injection pressure of 2,100 psi. Effective BHP (for burst) is 1,590 psi, the 0 psi (using an annular mud of 10.00 ppg) and the differential BHP load is gradient is -0.520 psi/ft. The minimum specified drift diameter is 7.875 in.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)



PLA NS PETROLEUM JPER. CO.

Оре	erator:	PPOC			Well	Name: I	BAYLUS	CADE FED	#6
Pro	oject	D:			Locat	ion: 2	075' FS	L 1700'	FWL
Design Parameters:Design Factors:Mud Weight (8.80 ppg): 0.457 psi/ftCollapse : 1.125Shut in casing pressure : 4231 psiBurst : 1.10Internal gradient (burst): 0.021 psi/ft8 Round : 1.75 (J)Annular gradient (burst) : 0.457 psi/ftButtress : 1.60 (J)Tensile load is determined using buoyed weight0ther : 1.50 (J)Service rating is "Sweet"Body Yield : 1.50 (B)									
	ength feet)	Size (in.)	Weight (lb/ft	Grad	e Join		Depth feet)	Drift (in.)	Cost
1 2 3 4	1,000 6,500 1,900 300	5.500 5.500 5.500 5.500	17.00 15.50 17.00 17.00	K-5 K-5 K-8 N-8	5 LT&C 5 LT&C		1,000 7,500 9,400 9,700	4.767 4.825 4.767 4.767	
1	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips	Tension Strgth) (kips)	
1 23 4	457 3429 4297 4434	3890 3871 4889 6280	8.510 1.129 1.138 1.416	4252 4252 3703 2874	5320 4810 5320 7740	1.25 1.13 1.44 2.69	134.2 119.5 32.3 4.4	6 <u>239</u> 7 272	2.03 J 2.00 J 8.40 J 78.84 J

Prepared by : DJB, Midland, Texas Date : 09-19-1994

Date Remarks - -

LEA COUNTY, NEW MEXICO Minimum segment length for the 9,700 foot well is 100 feet. SICP is based on the ideal gas law, a gas gravity of 0.15, and a mean gas temperature of 123°F (Surface 74°F, BHT 171°F & temp. gradient 1.000°/100 ft.) For burst purposes, lost circulation occurs behind the pipe at 6,000 ft, above which point, the annular mud weight of 8.800 ppg goes to zero. The equivalent pore gradient at the seat is 3.36 ppg.

NOTE: The design factors used in this casing string design are as shown above. As a general guide-line, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

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PLA NS PETROLEUM JPER. CO.

Operator: PPOC	Well	Name: B	AYLUS CAL	DE FED	#6	
Project ID:	Locat	ion: 20	75' FSL	1700'	FWL	
Design Parameters:Design Factors:Mud Weight (7.60 ppg): 0.395 psi/ftCollapse : 1.125Shut in casing pressure : 3751 psiBurst : 1.10Internal gradient (burst): 0.008 psi/ft8 Round : 1.75 (J)Annular gradient (burst) : 0.395 psi/ftButtress : 1.60 (J)Tensile load is determined using buoyed weight0ther : 1.50 (J)Service rating is "Sweet"Body Yield : 1.50 (B)						
Length Size Weight (feet) (in.) (lb/ft)			epth Dr eet) (i		Cost	
1 9,700 2.875 6.50	J-55 EUE	8rd 9	9,700 2.	.347		
Load Strigth S.F.	Burst Min Int Load Strgth (psi) (psi)	S.F.				
1 3830 7680 2.005	3751 7260	1.94	55.72	99.7	1.79 J	

Prepared by : DJB, Midland, Texas

Date : 09-19-1994 Remarks :

Remarks :

LEA COUNTY, NEW MEXICO Minimum segment length for the 9,700 foot well is 100 feet. SICP is based on the ideal gas law, a gas gravity of 0.15, and a mean gas temperature of 89°F (Surface 74°F, BHT 171°F & temp. gradient 1.000°/100 ft.) The minimum specified drift diameter is 7.875 in. An annular mud weight of 8.000 ppg was used for burst purposes. The differential mud gradient below any lost-circulation depth is -0.387 psi/ft

and the bottom hole pressure load is 0 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

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Plains Petroleum Operating Company Baylus Cade Federal #6 Lea County, New Mexico Lease No. 034711 September 19, 1994 Page 3

<u>SLURRY</u>

	Surface	Intermediate	Production 1st Stage	Production 2nd Stage
Recommendation	375 sx 'C' + 2% Cacl ₂ + 1/4#/sk Celloseal	Lead: 450 sx 'C' + .25% Dispersent + 2.5% Extender + .5% Gel + .2% Salt + 1/4 PPS Cellophane Tail: 100 sx Cl 'C' Neat	Lead: 100 sx 36:65 Poz 'C' + 6% Gel + 9 PPS Salt + .2% Defoamer + .8% F.L. Additive Tail: 575 sx 50:50 Pox 'C' + 2% Gel + 4 PPS Salt + .2% Defoamer + .6% F. L.	Lead: 150 sx 'C' + .25% Dispersent + 2.5% Extender + .5% Gel + .2% Salt + 1/4 PPS Cellophane Tail: 100 sx Cl 'C' Neat
Yield	1.32 Ft ³ /sk	2.85 Ft ³ /sk, 1.32 Ft ³ /sk,	2.14 Ft ³ /sx, 1.32 Ft ³ /sx	2.85 Ft ³ /sx, 1.32 Ft ³ /sx
Weight	14.8 PP G	11.6 PPG 14.8 PPG	12.7 PPG 14.2 PPG	11.6 PPG 14.8 PPG
Mix Water	6.32 gal/sk	17.2 gal/sk 6.32 gal/sk	11.6 gal/sk 6.2 gal/sk	17.2 gal/sk 6.32 gal/sk

Plains Petroleum Operating Company Baylus Cade Federal #6 Lea County, New Mexico Lease No. 037411 September 19, 1994 Page 4

4. **MUD DETAIL**

<u>DEPTH</u>	PROPERTIES	<u>TREATMENT</u>
0 - 350'	Weight: 8.7 - 9.4 Viscosity: 33 35 Solids: <4.	Spud Mud: Fresh water gel with sufficient to viscosity to clean hole.
350' - 3000'	Weight: 10.0 - 10.2 Viscosity: 26 - 28 Solids: < 1.0	Drill out from surface csg with brine water
3000' - 9700'	Weight: 8.6 - 9.2 Viscosity: 28 - 35 Solids < 1.0 WL 7 - 10	Drill out from intermediate casing with fresh water mud

PRESSURE CONTROL EQUIPMENT (BOPE) DETAIL 5.

W/annular De 13-5/8" API Shaffer 5000# series 900 dual hydraulic preventers Aadapted for the drilling contractors 4-1/2" drill pipe. The BOPS will be tested after they are installed on the surface casing, prior to drilling out, and each time they are removed or rearranged on the wellhead. See Exhibit A.

TESTING AND LOGGING PROGRAMS 6.

TESTING

Drill stem tests may be performed to quantify and identify prospective producing horizons as drilling progresses. Production testing will be commenced after the well is drilled and casing has been set and cemented.

LOGGING

At TD, the following open hole well logs will be run: GR-CNL-CDL-DLL-MLL

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067 2 7 1842

Plains Petroleum Operating Company Baylus Cade Federal #6 Lea County, New Mexico Lease No. 037411 September 19, 1994 Page 5

7. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are anticipated. Hydrogen sulfide is not expected to be encountered with this well.

8. ANTICIPATED START DATE:

November 1994 with completion on or about December 1994.

001 27 1992

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The Class III preventer stack is designed for drilling or workover operations. It is composed of a single hydraulically operated annular preventer on top, then a blind ram preventer, a drilling spool, and a single pipe ram preventer on bottom. The choke and kill lines are installed onto the drilling spool and must have a minimum internal diameter of 2°. All side outlets on the preventers or drilling spool must be flanged, studded, or clamped. An emergency kill line may be installed on the wellhead. A double ram preventer should only be used when space limitations make it necessary to remove the drilling spool. In these instances, the choke manifold should be connected to a flanged outlet between the preventer rams In this hookup, the pipe rams are only. considered master rams only, and cannot be used to routinely circulate out a kick. The Class III blowout preventer stack is shown to the right in Figure 11J.4.



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EXHIBIT A.2

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