K-06-55 8123/06 OMB No. 1004-0136 UNITED STATES Expires November 30, 2000 DEPARTMENT OF THE INTERIOR 5. Lease Serial No. **BUREAU OF LAND MANAGEMENT** NM-76944 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. REENTER 8. Lease Name and Well No. 19060 Oil Well b. Type of Well: Single \_\_\_ Gas Other Multiple Zone Pan Am Pardue ALZ Federal Com. #3 Well 9 API Well No. 2. Name of Operator CARLSBAD CONTROLLED WATER BASIN 0 - 0/5 - 3522 10. Field and Pool, or Exploratory **Yates Petroleum Corporation** 3b. Phone No. (include area code) 3A. Address 105 South Fourth Street 11. Sec., T., R. M., of Blk, and Survey or Area Artesia, New Mexico 88210 (505) 748-1471 hdi SUBJECTED RECEIPTION Clearly and in accordance with any State requirements.\*) ARPROVAL BY STATE 603' FNL and 545' FWL Surface Location 1980' FSL and 660' FWL Bottom Hole Location Section 27, T21S-R24E At proposed prod. Zone 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State Approximately 31 miles northwest of Carlsbad, New Mexico. NM **Eddy County** Distance from proposed\* 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest 603' property or lease line, ft. (Also to nearest drig. unit line, if any) 240 18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 20. BLM/BIA Bond No. on file 20' 585997 LIMD81 8650' 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3621' GL **ASAP** 45 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form: 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification. SUPO shall be filed with the appropriate Forest Service Office. Such other site specific information and/or plans as may be required by the authorized office. Name (Printed/Typed) 25. Signature Date Cy Cowan 8/22/2006 Regulatory Agent Regulatory Agent Name (Printed Islames Stovall Approved by (Signature) Date NOV U 1 2006 /s/ James Stovall TitlACTING FIELD MANAGER CARLSBAD FIELD OFFICE Application approval 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. APPROVAL FOR 1 YEAR. Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001and 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 reverse)

Previously Approved

C-144 attached APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

SEE ATTACHED FUR CONDITIONS OF APPROVAL MARTIN YATES, III

FRANK W. YATES 1936-1986



## 105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118 TELEPHONE (505) 748-1471

PRESIDENT
FRANK YATES, JR.

EXECUTIVE VICE PRESIDENT

S.P. YATES

CHAIRMAN EMERITUS

CHAIRMAN OF THE BOARD

PEYTON YATES

JOHN A. YATES, JR. SENIOR VICE PRESIDENT

October 5, 2006

Bureau of Land Management Carlsbad, New Mexico

VIA FAX and HAND CARRY

Re: Pan Am Pardue ALZ Federal Com. #3

603' FNL and 545' FWL Surface Location

1980' FSL and 660' FWL Bottom Hole Location

Section 27, T21S-R24E Eddy County, New Mexico

Please be advised that Yates Petroleum Corporation has a general agreement with Stacy Biebelle and Skip Shafer the private surface owners of the captioned lands for access to the well location. When approval is given by Yates Management to start construction operations in preparation for drilling this well the final monetary negations will be made with the surface owners.

Thank you.

Cy Cowan

Regulatory Agent

<u>District 1</u> 1625 N. Franch Dr. Hobbs, NM 88240 <u>District II</u> <del>371 South</del> First, Artesia, NM 86210 State of New Mexico Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

8/23/06 Form C-102

Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

K-06-55

District III 1000 Ro Brazos Rd., Aziso NW 87410

2040 South Pacheco Santa Fe, N M 87505

MENDED REPORT

District N 2040 South Pacheco, Sonta Fe, NM 87505

### WELL LOCATION AND ACREAGE DEDICATION PLAT

Projectly Code  PAN AM PARDUE ALZ FEDERAL COM.  Ociolis No.  Surface Location  A Section  D 27 21-5 24-5 24-E us laba. Feet from the Incertification for North Incertification	T T L	LLL LOOMING		TONE			. · · · · · · · · · · · · · · · · · · ·	
PAN AM PARDUE ALZ FEDERAL COM.  SUFFICE LOCATION  A CT LOT NO. Section Township Brings Lat No. Feet from the No. No. Section Township Brings Lat No. Section L	AP1 Number			1. 1 .	Pool Wi 177		Acces	
OCRIB No. O25575  PAN AM PARA ALL FEDERAL COM.  OCROSSION No. O25575  Surface Location  A or Lot No. Section  Bottom Hole Location If Different From Surface  A or Lot No. Section Hole Location If Different From Surface  A or Lot No. Section Formalip Range Lot in Part from Use Noort/South Real Feet from the Country  Bottom Hole Location If Different From Surface  A or Lot No. Section Range Lot in Part from Use Noort/South Real Feet from Surface  A or Lot No. Section Formalip Range Lot in Part from Use Noort/South Real Feet from Surface  A or Lot No. Section Formalip Range Location If Different From Surface  A or Lot No. Section Formalip Range Location If Different From Surface  A or Lot No. Section Formalip Range Location If Different From Surface In Part	Property Code			y Name	1251 n " D	Per 104V	Well Nur	mber
Surface Location A or Lot No. Section   Township   Ronge   Lot Mah.   Feet from the North/South fine   Feet from the   Entr/west fine   County   D 27 21-S 24-E   Lot Mah.   Feet from the   North/South fine   Feet from the   Entr/west fine   County   D 27 21-S 24-E   Lot Mah.   Feet from the   North/South fine   Feet from Surface   Location   Location   Location   Foliage   Lot Mah.   From Surface   Location   Location   Location   Location   Township   Ronge   Lot Mah.   From Surface   Location   Loca		PAN,			FEDERAL CO	М.	<u>)</u>	
Surface Location  A or Lot No. Section  Bottom Hole Location If Different From Surface  Bottom Hole Location If Different From Surface  Bottom Hole Location If Different From Surface  A or Lot No. Section  Bottom Hole Location If Different From Surface  A or Lot No. Section  Bottom Hole Location If Different From Surface  A or Lot No. Section  Bottom Hole Location If Different From Surface  A or Lot No. Section  Bottom Hole Location If Different From Surface  A or Lot No. Section  Bottom Hole Location If Different From Surface  Bottom Hole Location If Different From Surface Internation I		UIM			CODDODATION	T		•
A. or Lot No. Section Township Ronge Lot kin. Feet from the North/South Rain Feet from the DU 27 21-S 24-E 800 North 545 WEST EDDY  BOTTOM Hole Location If Different From Surface  A. or Lot No. Section Township Ronge Lot Kin. Feet Show the Health/South San Feet Row the Location If Different From Surface  A. or Lot No. Section Township Ronge Lot Kin. Feet Show the Health/South San Feet Row the Location If Different From Surface  A. or Lot No. Section Township Ronge Lot Kin. Feet Show the Health/South San Feet Row the Location If Different From Surface  A. or Lot No. Section Township Ronge Lot Kin. Feet Show the Health/South San Feet Row the Location If Different From Surface  A. or Lot No. Section Township Ronge Lot Kin. Feet Show the Health/South San Feet Row the Location In Surface Location In		IAT	<del></del>		JUKPUKATION	,	367	61
Bottom Hole Location If Different From Surface  A or Lot No. Section L27 21-S 24-E Lot ats. Past them by Menty/South the Tote from the East/Ment fine Country  L 27 21-S 24-E Lot ats. Past them by Menty/South the Tote from the East/Ment fine Country  Judicited Acres Joint or Infill Connectication Code Order No.  320  NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DM/SION  OPERATOR CERTIFICATION  LOCATION  Suprace Suprace Certification of Total Suprace Of the Total Suprace of Total Suprace Of the Total	N 1-A N- 1 C-N							<del></del>
Bottom Hole Location if Different From Surface  A or Lot No. Section Township Rongs Lot bin. 1980 SOUTH 660 WEST Compty  Judicular Acres Joint or still Consolidation Code Order No.  NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION  OPERATOR CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION  SURFACE LOCATION  SURFACE LOCATION  SURFACE LOCATION  SURFACE SURFA	I '''	1		l)	1 ' 1	l I		
A. or Lot No. Section Township Range Lot Mo.   Test horn by   Morth/South the   Test Not the   Test Not Section   Test Not Sect	<u>D</u>   21	<del></del>				345 M	201 12	DDI
Dedicated Acres Joint or hiff Consolidation Code Order No.  320  NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION OPERATOR CERTIFICATION INTEREST THAT THE DIVINIATION INTEREST THAT THE DIVINIATION INTEREST THAT THE DIVINIATION INTEREST THAT THE DIVINIATION INTEREST CENTURY THAT THE WILL LOCATION INTO THE PROPERTY OF	H as lat No   Caption							2
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DMISION  OPERATOR CERTIFICATION  Signolity  Printed Name Cy Cowan Title Regulatory Agent  Doto February 16, 2004  SURVEYOR CERTIFICATION  SURVEYOR CERTIFICATION  SURVEYOR CERTIFICATION  SURVEYOR CERTIFICATION  SURVEYOR CERTIFICATION  SURVEYOR CERTIFICATION  LEREST CHITT THAT THE STAL MORALITY  SURVEYOR OF AT MORALITY AND POSTERS AND SELECT.  DECEMBER 26, 2002  Doto of Surveyor  SURVEYOR AND ADDRESS SURVEYOR AND SELECT.  DECEMBER 26, 2002  Doto of Surveyor  SURVEYOR AND ADDRESS SURVEYOR AND SELECT.  SURVEYOR THE THIS THE SURVEY HAVE SURVEY HAVE BEEN THE STAL MORALITY HAVE SURVEY HAVE BEEN THE STAL MORALITY HAVE SURVEY HAVE BEEN THE STAL MORALITY HAVE SURVEY HAVE AND SOURCE AND SELECT.  DECEMBER 26, 2002  Doto of Surveyor  SURVEYOR THE THIS THE SURVEY HAVE BEEN THE STAL MORALITY HAVE SURVEY HAVE BEEN THE STALL MORALITY HAVE SURVEY HAVE BEEN THE SURVEY HAVE BEEN THE STALL MORALITY HAVE SURVEY HAVE BEEN THE SURVEY HAVE	i.				, ,			
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DMISION  OPERATOR CERTIFICATION  SIGNAL  SURVEY CONTRACT  LOCATION  SIGNAL  SURVEYOR CERTIFICATION  Title Regulatory Agent  Doto February 16, 2004  SURVEYOR CERTIFICATION  SURVEYO								
Signature  Signature  Signature  Signature  Signature  Signature  Printed Name Cy Cowan  Title Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  Longing rate plants and plants plant and plants promised and plants an	320			·				
SURFACE LOCATION  SURFACE LOCATION  SIGnotive  SIGnotive  Printed Name Cy Cowan  Title Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  IN ERREST CERTIFY THAT THE STREET TO THE REGULATORY  Printed Name Cy Cowan  Title Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  REREST CERTIFY THAT THE STREET HOSATON  SURVEYOR CERTIFICATION  REREST CERTIFY THAT THE STREET HOSATON  SURVEYOR THAT THE STREET HOSATON  SOUTH HOLE  BOTTOM HOLE  DECEMBER 26, 2002  Dote of Survey  Sendin with Surveyor  South MERCAN  SERVEYOR  S	NO ALLOWABLE	WILL BE ASSIGNE	D TO THIS	COMPLE	ETION UNTIL A	LL INTERES	T HAVE E	BEEN
SIGNOLE SURFACE LOCATION  SIGNOLE AND RELIEF.  Printed Name Cy Cowan  Title Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  I REREST CENTY THE THE SILL LOCATION  SURVEYOR CERTIFICATION  I REREST CENTY THE THE SILL LOCATION  SURVEYOR THE PLANT THE SILL LOCATION  SURVEYOR THE PLANT THE SILL LOCATION  SURVEYOR THE PLANT THE SILL LOCATION  SURVEYOR CERTIFICATION AND THE THE SILL LOCATION  SURVEYOR CERTIFICATION AND THE THE SILL LOCATION  DECEMBER 26, 2002  Dote of Surveyor  Sending und Sign A Surveyor  Sending und Sign A Surveyor  SURVEYOR CERTIFICATION AND THE THE SILL COLUMN SURVEYOR SURVEYOR  SURVEYOR CERTIFICATION  SURVEYO	CONSOLIDATED (	OR A NON-STAND	ARD UNIT	HAS BE	EN APPROVED	BY THE DI	VISION	
SIGNOLE SURFACE LOCATION  SIGNOLE AND RELIEF.  Printed Name Cy Cowan  Title Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  I REREST CENTY THE THE SILL LOCATION  SURVEYOR CERTIFICATION  I REREST CENTY THE THE SILL LOCATION  SURVEYOR THE PLANT THE SILL LOCATION  SURVEYOR THE PLANT THE SILL LOCATION  SURVEYOR THE PLANT THE SILL LOCATION  SURVEYOR CERTIFICATION AND THE THE SILL LOCATION  SURVEYOR CERTIFICATION AND THE THE SILL LOCATION  DECEMBER 26, 2002  Dote of Surveyor  Sending und Sign A Surveyor  Sending und Sign A Surveyor  SURVEYOR CERTIFICATION AND THE THE SILL COLUMN SURVEYOR SURVEYOR  SURVEYOR CERTIFICATION  SURVEYO			1			OPERATO	R CERTIF	ICATION
SURPACE LOCATION  SIGNATUR  Signatur  Printed Name Cy Cowan  Title Regulatory Agent  Date February 16, 2004  SURVEYOR CERTIFICATION  I HEREFY CERTIFIC	808			!		I HEREBY CER	THE THAT THE	DEFORMATION TO THE
SURFACE LOCATION  Signoture  Printed Name Cy Cowan  Fitte Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  SURVEYOR CERTIFICATION  HERRES CRITTY THAT THE FELL DOCATION  HERRES CRITTY THAT THE FELL DOCATION  SURVEYOR CERTIFICATION AND THAT  THE SELL DOCATION  DECEMBER 26, 2002  Date of Survey  December 26, 2002  Date of Survey  Signodure by Sign at Printed Sign at		ì	i	i		BEST OF MT K	HOWLEDGE AND .	BELIEF.
Signature  Printed Name Cy Cowan  Title Regulatory Agent  Date February 16, 2004  SURVEYOR CERTIFICATION I HEREST CERTIFY THAT THE SELL LOCATION FROM THIS PLAT SHE SHALL POST SHOW FREED MOUSE OF AGUAL SURVEYS AREA FOR THE PLATES FROM FREED FROM FREED FOR THE PLATES FROM FREED FROM FREED FROM FREED FOR THE PLATES FOR THE PLATES FROM FREED F	545' W		!	Ì				
Signature  Printed Name Cy Cowan  Title Regulatory Agent  Date February 16, 2004  SURVEYOR CERTIFICATION I HEREST CERTIFY THAT THE SELL LOCATION FROM THIS PLAT SHE SHALL POST SHOW FREED MOUSE OF AGUAL SURVEYS AREA FOR THE PLATES FROM FREED FROM FREED FOR THE PLATES FROM FREED FROM FREED FROM FREED FOR THE PLATES FOR THE PLATES FROM FREED F		j				}		
Signotive  Printed Name Cy Cowan  Title Regulatory Agent  Date February 16, 2004  SURVEYOR CERTIFICATION  HERBOY CRITTY THAT THE THALL LOCATION  HERBOY ON THIS PLAY THAT PAGE PLOTTED FROM  FIELD NOTES OF AUTHENIESS AND PAGE IN THE THAT THE SAME IS TRUE AND CORRECT TO THE SHOT OF TH				1				
Printed Name Cy Cowan  Title Regulatory Agent  Date February 16, 2004  SURVEYOR CERTIFICATION  I HERESY CRAITEY THAT THE WALL LOCATION SHOWN ON THIS PLAY WAS PLOTTED FROM FIRED PROTESS OF AGRICULTURE SURVEYS OF ART ALL SURVEYS ALL SURVEYS OF ART ALL SURVEYS ALL SURVEYS OF ART ALL SURVEYS ALL SURVEYS AND TEAT THE ARMS IS THUE AND CORRECT TO THE BEST OF HI INNOWANCES AND BELIEF.  DECEMBER 26, 2002  Date of Surveyor  Signature your Seal of Polephyria Se	BUGATUR	•					<u> </u>	_
Printed Name Cy Cowan  Title Regulatory Agent  Date February 16, 2004  SURVEYOR CERTIFICATION  I HERESY CRAITET THAT THE WALL LOCATION SERVEN ON THIS PLAY WAS PLOTTED FROM FIRED POSTS OF ANTIAL SURVEYS MADE BY MEE OR UNDER MY SUPERISTON, AND THAT THE SAME IS THERE AND CORRECT TO THE BREST OF MY INNOWARDES AND BELLEY.  DECEMBER 26, 2002  Date of Survey  Signaline your Sect of Publishing Surveyor  Signaline Your Section			1					7
Printed Name Cy Cowan  Title Regulatory Agent  Date February 16, 2004  SURVEYOR CERTIFICATION  I HERESY CRAITET THAT THE WALL LOCATION SERVEN ON THIS PLAY WAS PLOTTED FROM FIRED POSTS OF ANTIAL SURVEYS MADE BY MEE OR UNDER MY SUPERISTON, AND THAT THE SAME IS THERE AND CORRECT TO THE BREST OF MY INNOWARDES AND BELLEY.  DECEMBER 26, 2002  Date of Survey  Signaline your Sect of Publishing Surveyor  Signaline Your Section					•			
Title Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  I BEREFY CERTIFY THAT THE FILL LOCATION STROW ON THIS PLAT THE FULL LOCATION STROW ON THIS PLAT THE FULL LOCATION FIRED POSSES OF LOTTED FROM FIRED POSSES OF LOTTED FROM FIRED POSSES OF LOCATION AND STRUCT FIRED FOR ANY SURVEYOR AND STRUCT FIRED FOR ANY SURVEYOR AND SELECT  DECEMBER 26, 2002  Date of Survey  Signature with Signal of Policepings Surveyor  Signature with Signature with Signal of Policepings Signature with Sign				i		Signature	MI	WIM
Title Regulatory Agent  Dote February 16, 2004  SURVEYOR CERTIFICATION  I HERRY CERTIFY THAT THE WELL LOCATION STROW ON THIS PLAY WAS PLOTTED FROM FIRST WORSE OF ACTUAL SURVEYS MAD BY MAKE IN THIS PLAY WAS PLOTTED FROM THE ON CHARGE AT SURVEYS MAD BY THE WAS IN THIS PLAY WAS PARTY THE WAS IN THIS PLAY WAS PROPERLY THE WAS IN THIS PLAY WAS PROPERLY THE WAS IN THIS PLAY WAS PROPERLY THE WAS IN THE PLAY WAS PROPERLY THE REPORT OF ALL YOUR PROPER	• .			į		Printed Name	Cr. Corr	an
Dote February 16, 2004  SURVEYOR CERTIFICATION I BEREIN CRITIFY INT THE BULL LOCATION IS BOTTOM HOLE  BOTTOM HOLE  BOTTOM HOLE  DECEMBER 26, 2002  Dute of Survey  Signature with Serial Philadelpria Surveyor  Signature with Serial Philadelpria Surveyor  5412  5412  5412				ì		<u>                                     </u>		
SURVEYOR CERTIFICATION  I HERRHY CRAITET THAT THE WELL LOCATION SHOWN ON THIS PLAT WAS PLOTTED FROM THESE MOTES OF ACTUAL SURVEYS MADE BY MES ON UNDER MY SUPERVISION, AND THAT THE SHAME IS TRUE AND CORRECT TO THE BEST OF MY ENCOURAGE AND BELLET.  DECEMBER 26, 2002  Date of Survey  Signature with Signature				Ì		Title Reg	ulatory	Agent
SURVEYOR CERTIFICATION I HERRHY CRAITET THAT THE WELL LOCATION SHOWN ON THIS PLAT THE WELL LOCATION SHOWN ON THIS PLAT THE PAIL LOCATION SHOWN ON THIS PLAT THE PAIL LOCATION FIELD HOUSE OF JUSTIES MADE BY ME ON UNDER MY SURVEYS MADE BY THE RANGE IS TRUE AND CORRECT TO THE BEST OF MY ENOUNTEDED AND BELLET.  DECEMBER 26, 2002  Date of Survey  Signature parts sign at Polyteshippe Surveyor  OR SOLUTION  SET OF MEAN AND THE PAIR THE WELL LOCATION SHOWN ON THIS PLAT THE WELL LOCATION SHOWN ON THE WELL				ļ		Date Feb	ruary 16	, 2004
I HERRET CERTIFY THAT THE WELL LOCATION SHOWN ON THIS PLAT WAS PLOTTED FROM FIRED HOUSES OF AGTINED MADE BY THE WAS IN UNDER MY SUPERIORS MADE BY THE RAME IS TRUE AND CORRECT TO THE PREST OF MY RICHARDS AND BELSEF.  DECEMBER 26, 2002  Date of Survey  Signature parts Sign of Poleshiphe Surveyor						SURVEYO	R CERTIF	ICATION
DECEMBER 26, 2002 Date of Survey Signature and Shall of Policesional Surveyor  Superior and Shall of S	NM-769	144		T		I HEREBY CER	TIPY THAT THE	WELL LOCATION
DECEMBER 26, 2002 Date of Survey Signature and Shall of Policesional Surveyor  Superior and Shall of S			!	į		PIELD NOSES (	OF ACTUAL SURV	EYS MADE BY
DECEMBER 26, 2002  Date of Survey  Signification of Surveyor  OBS  5412  Signification of Surveyor  December 26, 2002  Date of Surveyor  Signification of Su		OLE	ì	1		THE SAME IS I	TRUE AND CORR. NOVLEDGE AND	BOT TO THE BELIEF.
Date of Survey Signature sunt Shall of Endreship and Surveyor  5412  5412	200011011		-	ļ		11		}
Date of Survey  Signature sand Said of Endeship of Surveyor  5412  Signature sand Said of Endeship of Surveyor						DECEM	BER 26,	2002
Sec. 5412		1	1	Í		Date of Supe	d0	
5412 EX 15 SA 12 EX 12 EX 15 SA 12 EX 12 E		T	<del>+</del>			- Signature found	Sear of Profession	Surveyor
5412 E	jo j		i	į			MENO	
5412 E	86,						101	\ \
Wex to the later				ļ			5412	ER E
MW. 88092		41	İ	İ			0 11.11	
MM. 90015	2000	1	1	!		Week h	T. Kolk	Ele 1
Condition Of the Control of the Cont	MM. Spors			ł		NAO PI	&PS 115	4/2
		A i L	<u> </u>				SUECECTUM,	

### YATES PETROLEUM CORPORATION

PanAm Pardue ALZ Federal Com. #3
603' FNL and 545' FWL Surface Location
1980' FSL and 660' FWL Bottom Hole Location
Section 27-T21S-R24E
Eddy County, New Mexico

1. The estimated tops of geologic markers are as follows:

San Andres	1184'	Wolf Camp	7320'
Glorieta	2808'	Cisco Canyon Dolomite	7959'
Bone Spring Lime	3559'	O/W Contact	8109'
2 <sup>nd</sup> Bone Spring	3814'	Base of Dolomite	8539'
Bone Spring Lime 2 <sup>nd</sup> Bone Spring 3 <sup>rd</sup> Bone Spring	6969'	TD	8650'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water:

150' - 250'

Oil or Gas:

All potential Zones.

3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

### **Auxiliary Equipment:**

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.
- 4. THE PROPOSED CASING AND CEMENTING PROGRAM:
  - A. Casing Program:

Hole Size	Casing Size	Wt./Ft	<u>Grade</u>	<u>Interval</u>	<u>Length</u>
14 3/4"	9 5/8" WIT	NPCC 36#	J-55	0-1800'	1800'
8 3/4"	7"	23#+26#	J-55/L-80	0-8650'	8650'

Yates Petroleum Corporation requests a variance to install a rotating head on the surface casing strings when intermediate casing will be set. If a BOP system is required then we wish to install a 2M system and receive a varience to test the system to 1000# using the rig pumps. The test will be held for 30 minutes on each system component. Components to be tested include pipe rams, blind rams, and annular preventer.

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 1.8

## Pan AM Pardue "ALZ" Federal Com. #3 Page 2

### B. CEMENTING PROGRAM:

Surface Casing: 1200 sx Lite (YLD 2.0 WT 12.0). Tail in with 250 sx Class "C" +2% CaCl2

(YLD 1.34 WT 14.8).

Production Casing TOC 1300': 600 sx Lite "C" (YLD 1.95 WT 12.5). Tail in with 700 sx

Class "C" (YLD 1.61 WT 13.2).

### 5. MUD PROGRAN AND AUXILIARY EQUIPMENT:

Interval	Type	<u>Weight</u>	Viscosity	Fluid Loss
0-1800'	FW/Air Mist	8.4	28	N/C
1800'-7900'	Cut Brine/Starch	8.7	28	N/C
7900'-8650'	SW Gel/Starch	8.7-8.9	3.4-38	<12-15 cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

### 6. EVALUATION PROGRAM:

Samples: Every 10' out from under intermediate casing.

Logging: Platform Express/Hals/ NGT.

Coring: None anticipated. None anticipated.

### 7. Abnormal Conditions: none anticipated.

Bottom hole pressure and potential hazards:

**Anticipated BHP:** 

From: 0 To: 1800' Anticipated Max. BHP: 700 PSI From: 1800' To: 8650' Anticipated Max. BHP: 4000 PSI

Lost Circulation Zones Anticipated: Possible in the Canyon Formation.

H2S Zones Anticipated: None.

Maximum Bottom Hole Temperature: 165 F

#### 8. ANTICIPATED STARTING DATE:

Plans are to drill this directional well as soon as possible after receiving approval. It should take approximately 30 days to drill this well with completion taking another 15 days.

# YATES PETROLEUM CORPORATION 105 South 4th Street

Artesia, NM 88210

## **FAX**

	10/11/06
***********	
NUMBE	ER OF PAGES INCLUDING COVER SHEET: 10

TO: Fred W	right		FROM: Jeremian	Marieu
		9.00%   17.11.00%   17.11.00%   17.11.00%   17.11.00%   17.11.00%   17.11.00%   17.11.00%   17.11.00%   17.11		Name of the state
Phone: 505-2	234-5938		IIIAAA IIIAA IIAA IIAA IIAA IIAA IIAA	The state of the s
Fax: 505-885-				
A STATE OF THE PARTY OF THE PAR	1 (2014) 19 (12 (2014) 19		PHONE: 505-748-4	378
			FAX: 505-748-466:	5
) A 14 16 14 16 14 16 16 16 16 16 16 16 16 16 16 16 16 16				
Remarks:	Urgent	☐ For Your Review	☐Reply ASAP	☐ Please Comment
			124     125     125     125     125     125     125     125     125     125     125     125     125     125	
pomono nase e nongromma nago, que o fásem bigado e del 18 dete 18 de 2010 de	Attached	are the directional plar	ns for the following wells	* *
happy oz 17 1887 by zymosomód sig, 1221 2231 6-61 kazdzád 1871 dzypp,	Pan Am	Pardue ALZ Federal Co	om. #3	יים ורובו ברוברו ודי האינו מיום בללון חיקו היים להוירופים וברים (ברים ליפוסקו קודו הוידון מעבולות בריבות (ברים -
1515    1515    1515    1515    1515    1515    1515    1515    1515    1515    1515    1515    1515    1515	Anadarko	o P. Farms ANQ Feder	al Com. #2	1981) 1991 1992 1994 1994 1994 1994 1994 1994
adminus pama amang pundan anah and 14 dap 23 da 17 da 25 da 26 da 26 da 26 da 26 da 26 da 26 da 26 da 26 da 26	i ichaari 1860 kilisaar fiidi idaanayyy jirkoonsiaa yili isto		4типририплициителяна инин-т	······································
an part hat the same state that and the same state the same as	tiel teliff t-dati confr price t-and analysis - and conserved the confra		· ····································	i Maranaran astari marakin aray maran Kili aray maran kili aray maran kili aray maran kili aray maran kili ara
\$1574.00.1 100.21 1.1174.001.00.00 2.10074.001.00 100.000.00 100.000.00 100.000.00	······································			1887 - 1988 - 1881, <sup>1888</sup> - 1 1881 - 1882 -
44.11.774.0174.11.774.11.774.11.771.1771.1	***************************************			ad a dagan kali da kali da kali marawak da maga pada naga pama naga pada na pada na pada naga kali da kali da k
	ورجوعها والمالة المالية والمارية والمارية والمارية والمارية المارية المارية المارية المارية المارية		. The same of the	
	ereseri et parmen prodenteroli i Chi phai i Messeri para		MPUPANY NY INDRIEDI MPI NY 1991 MAY 1997 MAY 1997 MAY 1997 MAY 1997 MAY 1997 MAY 1997 MAY 1997 MAY 1997 MAY 1	797 PF 1974   PF 1
**************************************	دمة د رمان كالمواجة المارة « المار» « منام» ، « منام» و المار» و المار» و المار» و المار» و المار»	i spiki - 1999 nijak - 1980 i Maji king 1980 i Ajiki inan 1984 kinda sawa sawa ka 1980 nija mpa mpa mpa mpa sawa sawa		
				The state of the s

Simulated Survey - C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\panam3

<del></del> _	<del>, ,</del>		_		٠,	-			- 1		_		_	_	_	_				_	-					-			_					-		$\neg$
T.F. Raf. [HS/GN]		S S	托	HS	HS	딾	SH	ΗS	HS	ST.	HS	HS	HS		HS.	HS	НS	왚																		
ToolFace [*]		178	0	360	360	380	360	360	0	360	0	0 .	360	0	0	0	360	0	0	360	360	360	0	360		180	180	180	180	180	180	180	180	180	180	180
D.L.S. ["/100ft]	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3,00	3.00	3.00	3.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
E+/W- [ft]	0.00	0.00	0.03	0.11	0.25	0.45	0.70	1.00	1.36	1.78	2.25	2.77	3.35	3.98	4.67	5.40	6.19	7.03	7.93	8.87	9.86	10.90	11.99	12.75	102.25	102.41	103.52	104.59	105.60	106.57	107.49	108.36	109.18	109.94	110.66	111.32
N+/S- [ff]	0.00	0.00	-0.65	-2.62	-5.88	-10.45	-16.32	-23.49	-31.95	-41.70	-52.72	-65.02	-78.58	-93.39	-109.45	-126.74	-145.25	-164.97	-185.88	-207.97	-231.23	-255.64	-281.18	-298.92	-2398.08	-2401.62	-2427.76	-2452.78	-2476.66	-2499.38	-2520.93	-2541.30	-2560.46	-2578.41	-2595.13	-2610.61
T.V.D. [ff]	0.00	1850.00	1899.99	1949.95	1999.85	2049,64	2099,28	2148.77	2198.04	2247.08	2295.85	2344.31	2392.43	2440.18	2487.52	2534.43	2580.87	2626.81	2672.22	2717.06	2761.31	2804.93	2847.90	2876.31	6173.69	6179.27	6221.88	8265.15	6309.07	6353.60	6398.70	6444.36	6490.53	6537.19	6584.31	6631.84
Azimuth ["]	0.00	0.00	177.58	177.58	177.56	177.56	177,56	177.56	177.56	177.56	177.56	177.56	177,56	177.56	177.56	177.58	177.56	177.56	177.56	177.56	177.56	177.58	177.56	177.56	177.56	177.56	177.56	177.56	177.56	177,56	177.58	177.56	177.56	177.56	177.56	177.58
Inclination [*]	0.00	00.0	1.50	3.00	4.50	6.00	7.50	9.00	10.50	12.00	13.50	15.00	16.50	18.00	19.50	21.00	22.50	24.00	25.50	27.00	28.50	30.00	31.50	32.50	32.50	32.31	30.81	29.31	27.81	28.31	24.81	23.31	21.81	20.31	18.81	17.31
M.D. [Ħ]	0.00	1850.00	1900.00	1950,00	2000.00	2050.00	2100.00	2150.00	2200.00	2250.00	2300.00	2350.00	2400.00	2450.00	2500.00	2550.00	2600.00	2650.00	2700.00	2750.00	2800.00	2850.00	2900.00	2933.50	6843,39	6850.00	6900.00	6950.00	2000.00	7050.00	7100.00	7150.00	7200.00	7250.00	7300.00	7350.00
	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	28	27	28	29	30	31	32	33	25	35	36

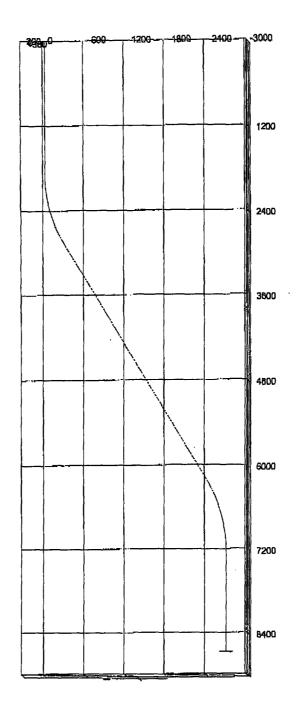
Page

 $\langle \omega_{\rm ch} | \mu_{\rm ch} >$  Simulated Survey - C:\Program Files\Drilling Toolbox 2001\text{Templates\Wellbore\panam3}

	M.D. [ft]	Inclination [7]	Azimuth ["]	Azimuth [*] T.V.D. [ft]	N+/S- [ft]	E+/W-[ft]	D.L.S. [*/100ft]	ToolFace [°]	T.F. Ref. [HS/GN]
37	7400.00	15.81	177.56	5679.77	-2624.85	111.92	3.00	180	SH
38	7450.00	14.31	177.56	6728.05	-2637.82	112.48	3.00	180	ES.
36	7500.00	12.81	177.56	99'9/19	-2649.53	112.98	3,00	180	S S
40	7550.00	11.31	177.56	6825.55	-2659.97	113.42	3.00	180	¥
41	7600.00	9.81	177.56	6874.70	-2669.12	113.81	3,00	180	HS
42	7650.00	8.31	177.56	8924.08	-2676.98	114.15	3.00	180	£
43	7700.00	6.81	177.56	6973.64	-2883.55	114.43	3.00	180	£
44	7750.00	5.31	177.56	7023.36	-2688.82	114.65	3.00	180	£
45	7800.00	3.81	177.56	7073.20	-2692.79	114.82	3.00	180	HS
46	7850.00	2.31	177,56	7123.13	-2695.45	114.93	3.00	180	HS
47	7900.00	0.81	177.56	7173.11	-2696.81	114.99	3.00	180	HS
48	7926.89	00:0	1.87	7200.00	-2697.00	115.00	3.00	358	N O
49	9376.89	00:00	00.0	8650.00	-2697.00	115.00	0.00		

### 3D3 Directional Drilling Planner - 3D View

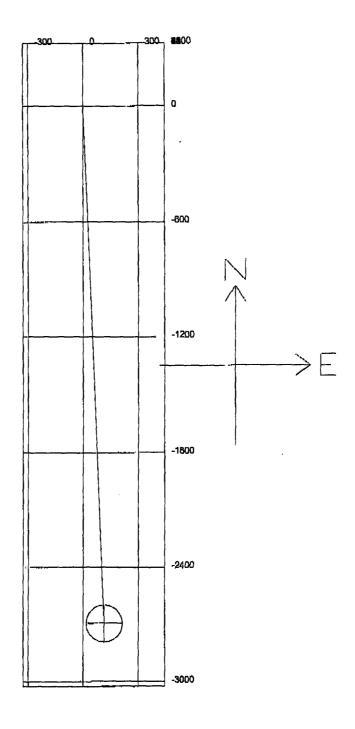
Company: Technical Toolboxes Inc. Well: Pan Am Pardue ALZ Fed. Com. #3



File: C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\panam3

### 3D3 Directional Drilling Planner - 3D View

Company: Technical Toolboxes inc. Well: Pan Am Pardue ALZ Fed. Com. #3



File: C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\panam3

OCT-11-2006 WED 03:20 PM YATES ENGINEERING FAX NO. 15057484585 Van Am Vardue ALZ Fed. Com. #3

### Production Casing

1st segment	9,377 ft to	8,000 ft	Make up Torque ft-lbs	Total ft = 1,377	
O.D.	Weight 26 #/ft	Lan LT&C			
Collapse Resistance	internal Yield 7,240 psi	Joint Strength \$1,000 #	Body Yield Drift 604 000 # 6454		

2nd segment	8,000 ft to	5,700 ft	Make up Torque ft-lbs	Total ft =	2,300
O.D. Ti inches	Welght 26 #/ft	Grade Threads	opt. min. mx. 3670 2750 4590		
Collapse Resistance	Internal Yield	Joint Strenath	Body Yield Drift #15 ,000 # 最初		

3rd segment	5,700 ft to	1,200 ft	Make up Torque ft-lbs	Total ft = 4,500
O.D.	Weight 23 #/n	Grade Threads	opt. min. mx. 3430 2350 3	
Collapse Resistance	Internal Yield	Joint Strength \$13,000 #		orift 26

4th segment	1,200 ft to	0 ft	Make up Torqu	e fi-lbs	Total ft =	1,200
O.D.	Weight 26 #/ft	Grade Threads	opt. min. 9670 2750	mx. <b>4590</b>		
Collapse Resistance	Internal Yield	Joint Strength 367,000 #	Body Yield 構造 ,000 #	Drift 6.151		

### MULTI-POINT SURFACE USE AND OPERATIONS PLAN Yates Petroleum Corporation

Pan Am Pardue "ALZ" Federal Com. #3
603' FNL and 545' FWL Surface Location
1980' FSL and 660' FWL Bottom Hole Location
Section 27-T21S-R24E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

### 1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximately 31 miles northwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

### **DIRECTIONS:**

Go north of Carlsbad, New Mexico on Highway 285 for approximately 12 miles. Turn left on Highway 137 (Scenick Byeway) and go approximately 9 miles. The new access road will start here going to the northeast.

### 2. PLANNED ACCESS ROAD:

- A. The new access will be approximately .1 of a mile from Hwy 137 to the southwest corner of the well pad.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side. Traffic turnouts may be built.
- D. The route of the rod is visible.
- E. Existing roads will be maintained in the same or better condition.

### 3. LOCATION OF EXISTING WELL

- A. There is drilling activity within a one-mile radius of the well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

### Pan Am Pardue "ALZ" Federal Com. #3 Page 2

### LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

### 6. SOURCE OF CONSTRUCTION MATERIALS:

Dirt contractor will locate closest pit and obtain any permits and materials needed for construction.

### 7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the reserve pits.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.

D. Oil produced during operations will be stored in tanks until sold.

E. Current laws and regulations pertaining to the disposal of human waste will be complied with.

F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

### 8. ANCILLARY FACILITIES:

A. None Required.

### 9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 600' x 600' area has been staked and flagged.

### 10. PLANS FOR RESTORATION

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

### Pan Am Pardue "ALZ" Federal Com. #3 Page 3

11. SURFACE OWNERSHIP: Private surface owned by Stacy Biebelle and Skip Shafer, Carlsbad, New Mexico.

### 12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

### 13. OPERATOR'S REPRESENTATIVE

A. Through A.P.D. Approval:

B. Through Drilling Operations, Completions and Production:

Cy Cowan, Regulatory Agent

Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471 Pinson McWhorter, Operations Manager Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471

### 14. CERTIFICATION:

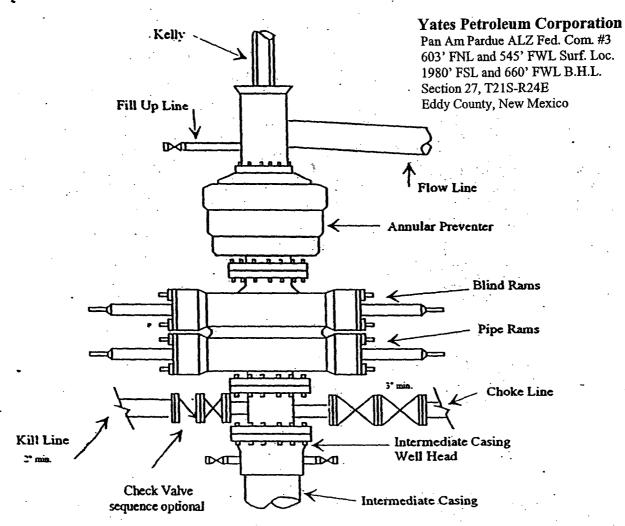
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

8/22/2006

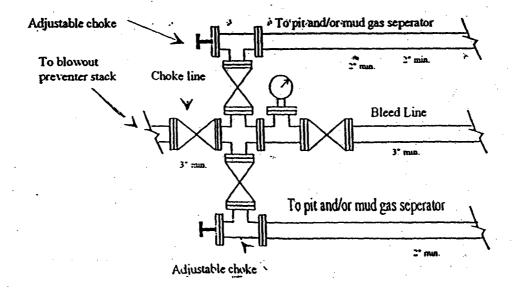
Cy Cowan, Regulatory Agent

### Yates Petroleum Corporation

Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



Typical 3,000 psi choke manifold assembly with at least these minimum features



### CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Yates Petroleum Corp.

Well Name & No.

Pan Am Pardue ALZ Fed Com # 3

Location: BHL:

603' FNL, 545' FWL, SEC 27, T21S, R24E, Eddy County, NM 1980' FNL, 660' FWL, SEC 27, T21S, R24E, Eddy County, NM

Lease:

NM-76944FSL Je

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- A. Spudding
- B. Cementing casing: 9 5/8 inch 7 inch
- C. BOP tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling out of the surface casing. A copy of the plan shall be posted at the drilling site.
- 3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing ( size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
- 7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

#### II. CASING:

- 1. The 9 5/8 inch surface casing shall be set at 1800 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 200 feet above the base of the intermediate casing string.
- 3. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

#### III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 9 5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be 3000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 9 5/8 inch casing shall be 3000 psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- A variance to test the \_\_\_\_\_ to the reduced pressure of \_\_\_psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

Engineering may be contacted at 505-706-2779 for variances if necessary.