	EXPEDITE RIG W NIT	TED STATE	ILABI S &1/	E (Other instru	eide)	FORM AP OMB NO. Proires: Febr	PROVED 1004-0136
1039) Down	DEPARTMENT	OF THE I	NTE	104/0511 CT/15 RIOR 1301 W. Gra	nd Av	ENTE DESIGNATIO	N AND BERIAL NO.
	ICATION FOR P	ERMIT TO	DRIL	LARDEPEN	// 882	NM-104647	
1a. TYPE OF WORK	ILL 1 8146	DEEPEN 3				7. UNIT AGREEMENT	NAME .
b. Tipe of Well	-						77712
	227851	ISPOSAL		INGLE MULTI	PLE	8. FARM OR LEASE NAME W	
LATIGO PETROL		2-684-4293) MAR	RK FARICHILD		9. ARI WELL NO.	FEDERAL # 1
3. ADDRESS AND TELEPHONE NO.	C CULTE 700 M	TOTAND TE	ZAC	(//22 68/-//2021		30-015	-10746
4. LOCATION OF WELL (R	S SUITE 700 M seport location clearly and	•				DEVONIAN SWD	9000
At surface 801' FWT. & 7	18' FNL SECTION	6 T22S-R	25E	EDDY CO RECEIV	NED	11. SEC., T., R., M., OR AND SURVEY OR	BLK.
At proposed prod. zon	SAME			NOV 0/3	2005	SECTION 6	T22S-R25E
	AND DIRECTION FROM NEAR	• • •		" OCB-SA		12. COUNTY OR PARIS	H 13. STATE
Approximately	15 miles North	west of Car		d New Mexico		EDDY CO.	NEW MEXICO
LOCATION TO NEAREST PROPERTY OR LEASE I (Also to nearest dr)	LINE, FT. 71	8'		160		HIS WILL	
18. DISTANCE FROM PROF TO NEAREST WELL, D	COSED LOCATION®		19. г	ROPOSED DEPTH		ARY OR CABLE TOOLS	
OR APPLIED FOR, ON TH		NA	<u> </u>	11,500	ROT	TARY	ORK WILL STARTS
	,,,	3743'	GR.			WHEN APPROVE	
23.		PROPOSED CASI	NG ANI	D CEMENTING PROGRA	M		
SIZE OF ROLE	GRADE, SIZE OF CASING	WEIGHT PER F	оот	SETTING DEPTH		QUANTITY OF CEMI	:NT
17½"	H-40 13 3/8"	48#		312' 2505'	250 S		
12½'' 7_7/8''	J-55 8 5/8" HCP-110 5½"	24 & 32# 17#	· · · · · · · · · · · · · · · · · · ·	11.500'	1795 S	5X	500' FS
	•						
2. Drill 7 7/8 Cement with stage with with 450 Sx Class "C" c surface. 3. Complete we	"hole to 11,50 "hole to 11,50 1205 Sx of cem 655 Sx. of Clas of Interfill ement + 2% CaCl	0'. Run and two is "H" supe Class "H" , + ¼# Flo	d set stag r "H' cemer cele/	ges, Set Dv Too cement + addi nt + additives, Sx. Estimate A Gell. A	1 at 75 tives, tail 1 PPRO ENERA ND SPI TTACH	500'±. Cement cement 2nd st in with 100 Sx cement 3500' f VAL SUBJECT AL REQUIREN ECIAL STIPUI HED	1st age of TO MENTS LATIONS
	EUM, INC. ACCEP				OPERAT	TION OF THIS L	£ASE.
SWB	Order requ	. me d · 1)/	-, ((OCA			
IN ABOVE SPACE DESCRIB	E PROPOSED PROGRAM: If nent data on subsurface location	proposal is to deepen,	give data	on present productive zone	and proposed	d new productive zone. If p , if any.	proposal is to drill or
SIGNED SIGNED	ct Jan	wia	Ag	gent		DATE09/3	30/05
(This space for Fede	ral or State office use)						
PERMIT NO.				APPROVAL DATE			
Application approval does a CONDITIONS OF APPROVAL	not warrant or certify that the app				lease which w	rould entitle the applicant to o	mater operations are con-
	s/ Joe G. Lara		TING	LIEPD MUM	GER	VOV -	- 1 2005
		*Saa laata		On Reverse Side	•		

State of New Mexico

1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

WELL LOCATION AND ACREAGE DEDICATION PLAT

DISTRICT II

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT IV

Santa Fe, New Mexico 87505

□ AMENDED REPORT

Form C-102

1220 S. ST. FRANCIS DR., SANTA FE, NM	87505	LI AMENDA REPORT
API Number	Pool Code Code KIMBALL "6" FEDERAL # 1 S	WD
Property Code	5 COD De venian Property Name KIMBALL FEDERAL	Well Number
OGRID No. 227001	Operator Name LATIGO PETROLEUM, INC.	Elevation 3743'

Surface Location

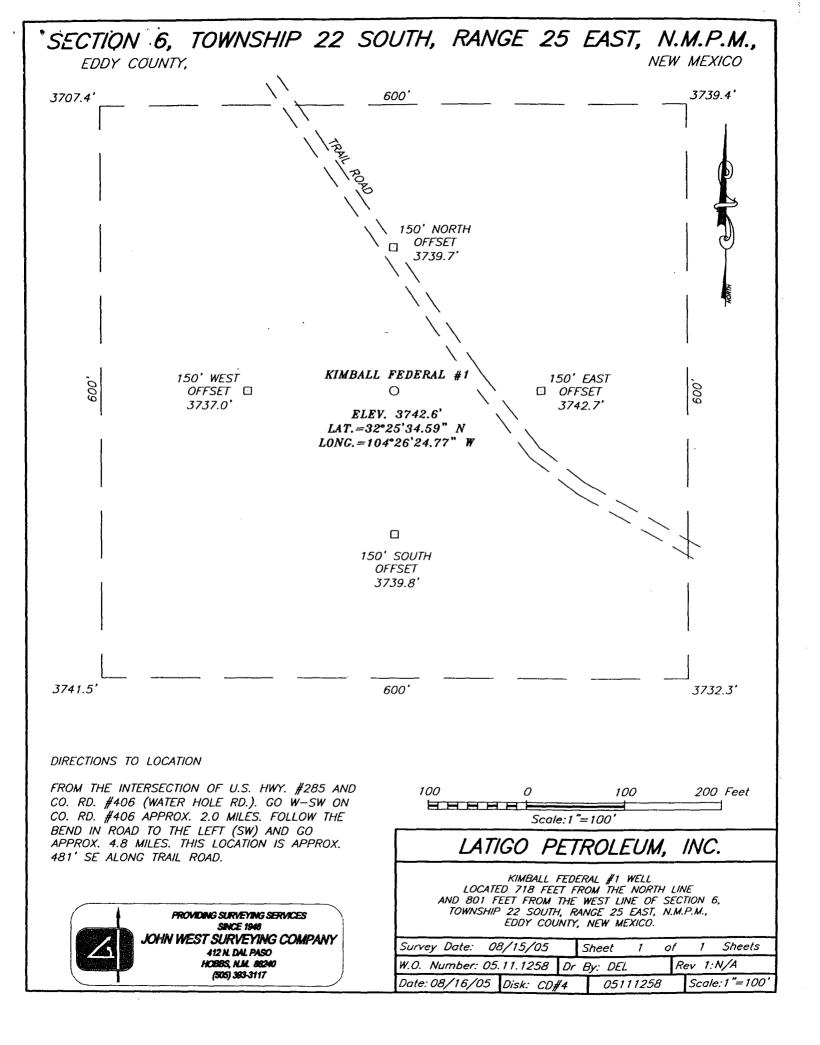
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	Rast/West line	County
4	6	22-S	25-E		718	NORTH	801	WEST	EDDY

Bottom Hole Location If Different From Surface

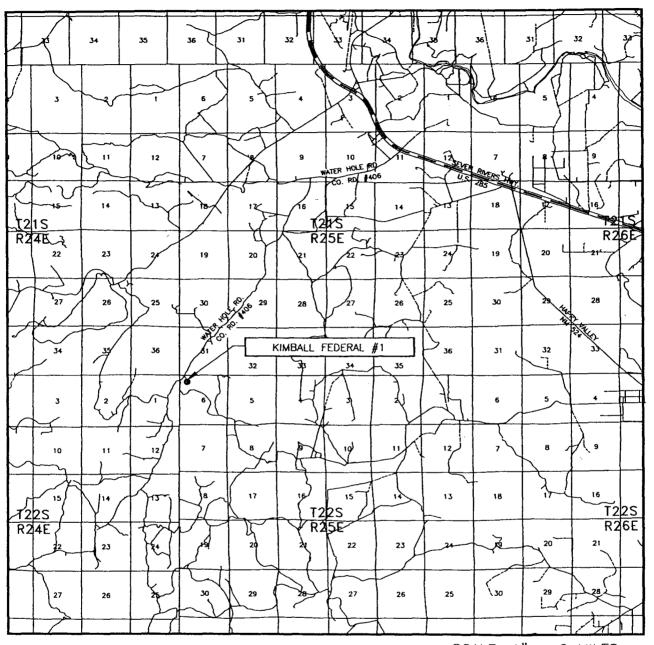
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	or Infill Co	nsolidation	Code Or	der No.			1	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 4	LOT 3	LOT 2	LOT 1	CARRAGE GRAMMAN
38.92 AC		,		OPERATOR CERTIFICATION
3707.4' _ 3739.4'				I hereby certify the the information
	l	1		contained herein is true and complete to the
801 - 0 00	l			best of my knowledge and belief.
600,				
3741.5' 3732.3'	I	1		pet fance
5.02.5	40.07 AC	40.13 AC	40.17 AC	Signature
LOT 5				Joe T. Vanica
				Printed Name
,	ŀ			Agent
				Title
1	Ì	,		09/30/05
				Date
l		t		
39.06 AC				SURVEYOR CERTIFICATION
LOT 6	GEODETIC COO	IRNINATES		I hereby certify that the well location shown
1	NAD 27			on this plat was plotted from field notes of
İ				actual surveys made by me or under my
1	Y=518809	• • • • • • • • • • • • • • • • • • • •		supervison and that the same is true and correct to the best of my belief.
	X=467021	.5 E		Correct to the other of my date.
	LAT.=32°25'3	4.59" N		AUGUST 15, 2005
20.04.40	LONG. = 104°26	24.77" W		Date Surveyed annumber DEL
39.24 AC				Signatura & Seal of
201 /	l			Professional Surveyor Ally
1	1	i		
1		1		Bar 12 100 B/19/05
1	1	1		05 14 1258
ì	}	1		1 200
!	1			Certificate No. GABY ERDSON 12841
39.41 AC		1		PROFESSIONAL MANAGEMENT OF THE PROPERTY OF THE
				- autilities



VICINITY MAP



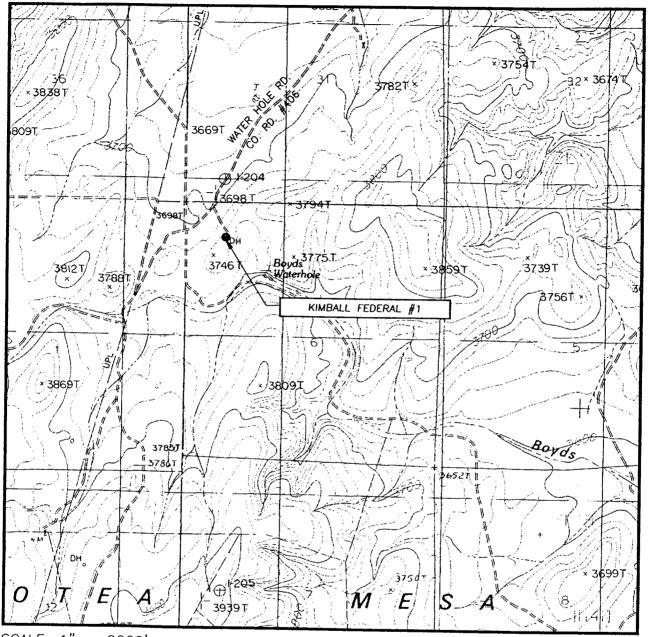
SCALE: 1" = 2 MILES

SEC. <u>6</u> T	WP. <u>22-S</u> RGE. <u>25-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION	718' FNL & 801' FWL
ELEVATION	3743'
OPERATOR_L	ATIGO PETROLEUM, INC.
LEASE	KIMBALI FEDERAL





LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: AZOTEA PEAK, N.M. — 20'

SEC. 6 TWP. 22-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY____EDDY

DESCRIPTION 718' FNL & 801' FWL

ELEVATION 3743'

OPERATOR LATIGO PETROLEUM, INC.

LEASE KIMBALL FEDERAL

U.S.G.S. TOPOGRAPHIC MAP AZOTEA PEAK, N.M.



PROVIDING SURVEYING SERVICES SINCE 1948 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240

(505) 393-3117

юни

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
KIMBALL "6" FEDERAL # 1
UNIT "D" SECTION 6
T22S-R25E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

- 1. Location: 718' FNL & 801'FWL SECTION 6 T22S-R25E EDDY CO. NM
- 2. Elevation above Sea Level: 3743' GR.
- 3. Geologic name of surface formation: Quaternery Aeolian Deposits.
- 4. <u>Drilling tools and associated equipment:</u> Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
- 5. Proposed drilling depth: DEEPEN TO 11,500' (THIS IS A RE-ENTRY)
- 6. Estimated tops of geological markers:

Delaware	2505'	Wolfcamp lime	7505 '
Bone Spring Carb.	3650 '	Wolfcamp Shale	7575 '
1st Bone Spring S	d.4795'	Cisco Canyon Reef	8000'
3rd BS SD Dean	7195	Devonian	11,200'

7. Possible mineral bearing formations:

Cisco Canyon Reef

Oil, Gas, Water

8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
17½"	0-312'	13 3/8" *	48 <i>‡</i>	8-R	ST&C	H-40
12½"	0-2505	8 5/8" *	32∦ 24#	8-R	ST&C	J-55
7 7/8"	0-11,500'	5½''	17#	8-R Butt.	BT&C	P-110 N-80

- * 13 3/8" casing is in place cemented with 250 Sx., cement circulated to surface.
- st 8 5/8" Casing is in place cemented with 1795 Sx.,cement circulated to surface.

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
KIMBALL "6" FEDERAL # 1
UNIT "D" SECTION 6
T22S-R25E EDDY CO. NM

9. CEMENTING & SETTING DEPTH:

13 3/8"	Surface	312' of 13 $3/8$ " $48\#$ H-40 ST&C casing was run and cemented with 250 Sx. and circulated to surface.
8 5/8"	Intermediate	2505' of 8 5/8" 24# & 32# J-55 ST&C casing was run and Cemented in place with 1795 Sx. of cement and cement was circulated to surface.
5 ¹ 2''	Production	Run and set 11,500' of $5\frac{1}{2}$ " $17\#$ P-110 & N-80 LT&C & BT&C. Cement in 2 stages with DV Tool at 7500'±. cement 1st stage with 655 Sx. of Super Class "H" cement + additives, cement 2nd stage with 450 Sx. of Class "H" Premium Plus cement + additives, tail in with 100 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{2}\#$ Flocele/Sx. Cement top must be at least 500' above the upper most Hydrocarbon productive interval.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1500 Series 5000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nippled up on the 8.5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	····FLUID LO	SS TYPE MUD SYSTEM
0-11,500'	10.0-10.2	29-38	NC	* Cut Brine/Brine use paper to control seepage and high viscosity sweeps to clean hole

This is a Re-entry cement plugs will be drilled and hole will be cleaned out to old TD 10,900' Then drilled to a TD of 11,500'

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing viscosity and/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
KIMBALL "6" FEDERAL # 1
UNIT "D" SECTION 6
T22S-R25E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, SNP, LDT, MSFL, Gamma Ray, Caliper from TD back to 10,800' in order to tie into logs previously run.
- B. Rig up mud logger on hole at 10,900' when new hole begins.
- C. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of $\rm H^2S$ in this area. If $\rm H^2S$ is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 5500 PSI, and Estimated BHT 195°

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 8 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on disposal.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The <u>Devonian</u> formation will be perforated and stimulated in order to establish injection rate and will be campleted as a salt water disposal well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazzards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H2S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
- 2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
- 4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well control equipment
 - A. See exhibit "E"
- 6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
- 7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If location is near any dwelling a closed D.S.T. will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
- 9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

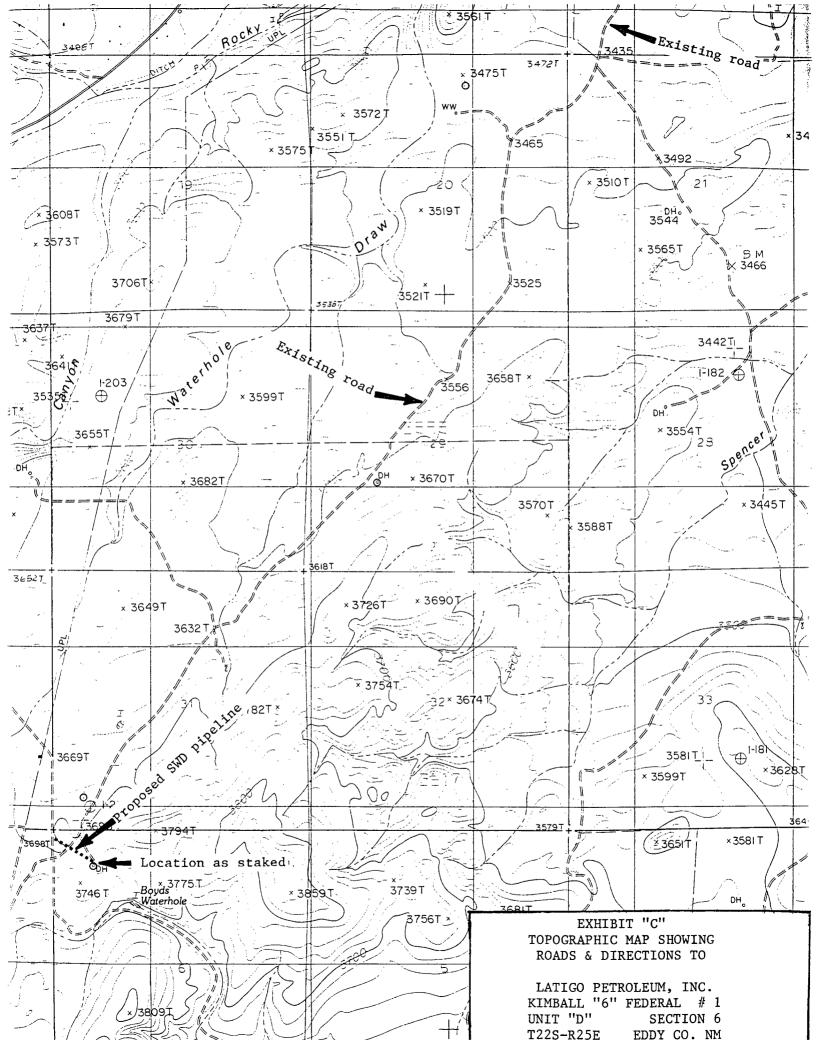
LATIGO PETROLEUM, INC.
KIMBALL "6" FEDERAL # 1
UNIT "D" SECTION 6
T22S-R25E EDDY CO. NM

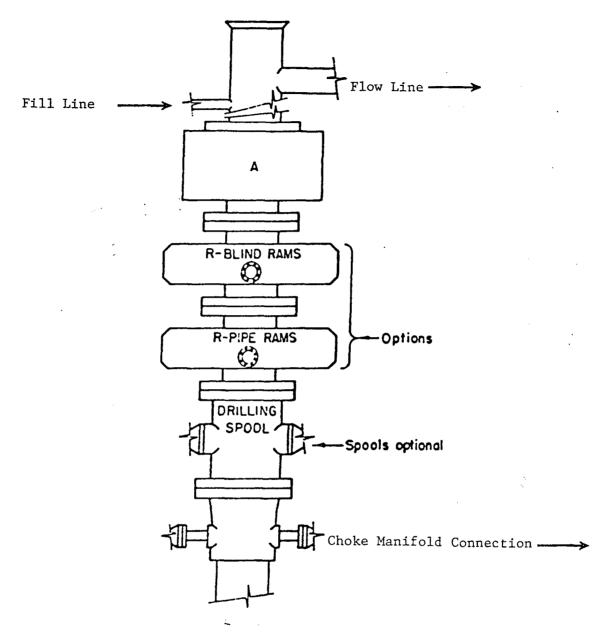
- 1. EXISTING AND PROPOSED ROADS: Area maps: Exhibit "B" is a reproduction of a County General Hi-way map showing access roads to the location. Exhibit "C" is a reproduction of a USGS Topographic map showing existing roads in close proximity to the location and the proposed access roads. All existing roads will be maintained in a condition equal to or better than their current conditions. All new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the location of the proposed well site as staked.
 - B. From the junction of U.S. Hi-ways 62-180 and 285 go North 10.7 miles to CR.-406 (Waterhole Road) go 2 miles bear Left follow road 5.1 miles to location on hill to the Left side of road.
 - C. Exhibit "C" shows the route of proposed salt water disposal line.

- 2. PLANNED ACCESS ROADS: No new road will be necessary.
 - A. The access road will be crowned and ditched to a 12' wide traveled surface with a 40' Right-Of-Way.
 - B. Gradient on all roads will be less than 5% if possible.
 - C. Turn-outs will be constructed where necessary.
 - D. If needed roads will be surfaced to the BLM requirements with material obtained from a local source.
 - E. Center line of new road will be flagged.
 - F. The new road will be constructed to utilize low water crossings where drainage currently exists, and culverts will be installed where necessary.

3. EXHIBIT "A-1" SHOWS THE BELOW LISTED TYPE WELLS WITHIN A 1 MILE RADIUS:

- A. Water wells Windmill .9 miles North of location
- B. Disposal wells None known
- C. Drilling wells None known
- D. Producing wells As shown on Exhibit "A-1"
- E. Abandoned wells As shown on Exhibit "A-1"





ARRANGEMENT SRRA

1500 Series 5000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

LATIGO PETROLEUM, INC. KIMBALL"6" FEDERAL # 1 UNIT "D" SECTION 6 T22S-R25E EDDY CO. NM



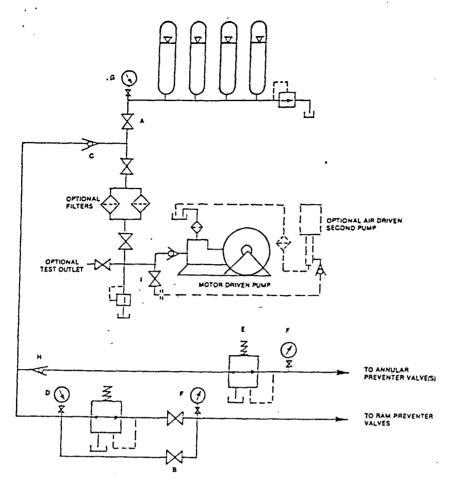


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

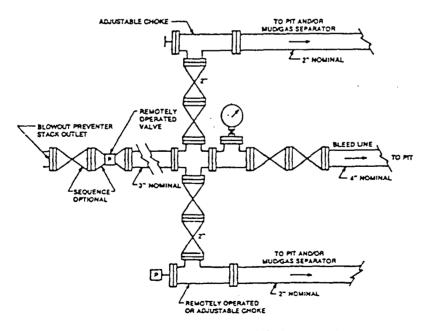


FIGURE K42. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

LATIGO PETROLEUM, INC.
KIMBALL "6" FEDERAL # 1
UNIT "D" SECTION 6
T22S-R25E EDDY CO. NM

Conditions of Approval for Latigo Petroleum INC. Lease No. NM-104647

718 FNL & 801 FWL, Sect.6, T.22 S., R.25E. Bottom Hole: 1980 FNL & 1980 FWL, Sect. 11, T.22 S., R.24E.

Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

- 1. The pad will be limited to existing disturbance.
- 2. A closed mud system or steel tanks will be utilized for the drilling fluids and cuttings. All fluids and cuttings will be hauled off site to be disposed off.
- 3. All above ground facilities, structures, appurtenances, and pipelines will be low profile (less than 8 feet in height)
- 4. Pipelines will be installed on the surface.
- 5. All above ground facilities, structures, appurtenances, and pipelines will be painted a non-reflective (Flat) Juniper Green.
- **6.** If the well is a producer and after one year there no plans to drill additional wells from the same location the location will be reclaimed back to the anchors according to standard reclamation procedures.

Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns.

- 1. Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst are expected (at a minimum of 2,000 feet). Below those zones, the operator may use whatever drilling fluid is approved in the drilling plan.
- 2. All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.
- 3. A cave protection casing will be required. The cave-protection casing string would be set at least 100 feet below the deepest known cave-bearing zone as determined by drilling. (See attached diagram as an example)
- 4. All new casing strings will be cemented to the surface.

 Regardless of the type of drilling machinery used, if a bit drop of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified. Contact Jim Amos at (505) 234-5909 or cell # 706-2775. BLM will assess the consequences of the situation and work with Operator on corrective actions to resolve the problem. Any corrective actions proposed to resolve problems related to bit drops or lost circulation will require BLM concurrence prior to implementation. A decision on how to proceed will be reached within 24 hours of notification.
- 5. The casing will be cemented in place using one or a combination of any of the following methods that are environmentally sound, as determined by the BLM and the Operator:
 - a). If a large void is encountered, isolation from above and below rather than complete cement coverage of these zones could be employed. This would be

accomplished by using stage cementing equipment, external packers, cement baskets, and one-inch remedial cementing techniques.

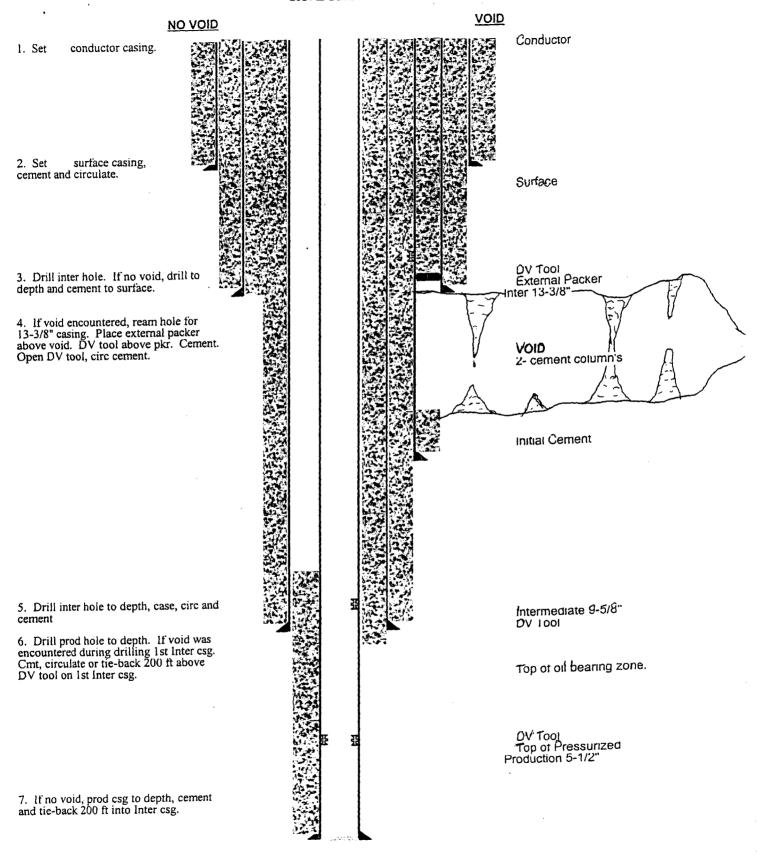
- b). For a less severe lost circulation zone encountered while drilling, the operator will attempt to circulate cement to the surface using a single or multistage cementing job composed of a "lead" and "tail" slurry for each stage. c.) Foam cementing techniques may be used.
- 6. Any blasting will be a phased and time delayed.
- 7. Upon well abandonment the well bore will be cemented completely from the bottom of the Goatseep dolomite to the surface.

Record Keeping

- 1. The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.
- 2. The BLM may review data held by companies on wells drilled in cave or karst areas, to gain information about impacts to caves and karst. This information will be used to categorize lost-circulation zones on the basis of depth, relative volume, and severity, and to evaluate and compare the relative success or failure of different remedies attempted to combat lost-circulation problems while drilling and cementing casing in these zones. This information also will be used to update information about the occurrence of cave and karst features. Information concerning cave resources gathered during drilling will be submitted and be retained by the BLM in accordance with The Carlsbad Field Office Cave Management Plan and the regulations implementing the Federal Cave Resources Protection Act.

WELLBORE SCHEMATIC

"CAVE PROTECTION"



CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

LATIGO PETROLEUM, INC. 1 – KIMBALL 6 FEDERAL

Well Name & No. Location:

801' FWL & 718' FNL - SEC 6 - T22S - R25E - EDDY COUNTY

Lease:

NM-104647

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - 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:

THIS IS A RE-ENTRY – CEMENT PLUGS WILL BE DRILLED AND HOLE CLEANED OUT TO OLD TD=10900' THEN DRILLED TO NEW TD=11500'

A. Spudding

B. Cementing casing: 5-1/2 inch

Casing in place: 13-3/8" casing is set @ 312' & cemented to surface - 8-5/8" casing is set @ 2505' & cemented to surface

- C. BOP tests
- 2. There is no known presence of Hydrogen Sulfide (H2S) gas in this area, however a drilling plan will be activated should H2S gas be encountered.
- 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.

II. CASING:

1. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend our fact upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

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 **8-5/8** 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.

00

- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required shall be <u>5000</u> psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- 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.