Form 3160-3 (July 1992)

OCD-HOBB SBMIT IN TRIPLICATE *
(Other Instructions on

FORM APPROVED OMB NO. 1004-0136

reverse side) Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR

,	BUREAU OF LAND MA	NAGEMEN [*]	T			5LEASE DESIGNATION AND	SERIAL NO.
	CATION FOR PERM			DEEDEN		LC-032096A 6IF INDIAN, ALLOTTEE OR 1	EDIDE MANG
la TYPE OF WORK	ATION FOR PERIM	II IO DKI	LL OR	DEEPEN		oif Indian, ALLOTTEE OR	RIBE NAME
DRII	LL X DE	EPEN _]			7. UNIT AGREEMENT NAME	
b. TYPE OF WELL OIL GAS			CDICI E			8. FARM OR LEASE NAME, WE	LL NO/ 35 4
WELL X WELL	OTHER		SINGLE ZONE	MULTIPLE ZONE	X	Lockhart A-27 #1	~
2. NAME OF OPERATOR			1			9. API WELL NO.	7. 61
	ache Corporation (CO1					30-025-	
3. ADDRESS AND TELEPHON	NE NO. Agent: P.O.Box 8309, Ros	well, NM 88202	505-624-97	99 (Bonnie Jones)		10. FIELD AND POOL OR WILL	
4. LOCATION OF WELL (Re	. #1500. Tulsa. OK 74136 918-49 port location clearly and in according	21-4907 (Glenn) ance with any St	ati Seno	Approval to Ager	it: -	Wantz; Abo (62	/00)
At Surface 2310' F	NL, 330' FEL, Unit H	-		P. O. Box 8309 vell, NM 88202-83	00	AND SURVEY OR AREA	
At proposed prod. Zone	2310' FNL, 330' FEL, Uni	t H	KOSV	ven, 141vi 88202-83	U9	Sec. 27, T21S-R37E,	NMPM
14. DISTANCE IN MILES AN	D DIRECTION FROM NEAREST TOW	N OR POST OFFICE	*			12. COUNTY FOR PARISH	13.STATE
±1/2 mile northea		· OR FOUT OFFICE	_			Lea	NM
15. DISTANCE FROM PROPO	,		16 20 00	A CDDC BILDACE	1 17 10		
LOCATION TO NEAREST			10. NO. OF	ACRES IN LEASE	1	OF ACRES ASSIGNED THIS WELL	
PROPERTY OR LEASE LI (Also to nearest drlg, u			640	.00		40.00	
18. DISTANCE FROM PROPO	SED LOCATION *		19. PROPO	SED DEPTH	20. RO	TARY OR CABLE TOOLS	
TO NEAREST WELL, DRI OR APPLIED FOR, ON TH	405		7,400)'	F	Cotary	
21. ELEVATIONS (Show wh			1,,,,,		22	APPROX. DATE WORK AT AST	ART *
3394' (KB)	, , ,				<u> [</u> [.]	ASAPon	
					/f>	sodok	
23.	PROPOS	SED CASING A	ND CEMEN	TING PROGRAM	15	r soon	
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PE	R FOOT	SETTING DEPTH	1/5	QUANTITY OF CEM	ENT
				_	/2/		/
		See Ex	hibit !	<u> </u>	12		
		<u> </u>				<u> </u>	
				API	PROV	AL SUBJECT TO	
Anticipated Durat	tion of Program: Drill	ing – 16 d	ays	GE	NERA	L REQUIREMENT	rs and
G 4 1 1E 1	Com	pletion - 2	8 days	SP(eciai	. STIPULATIONS	
See attached Exhi	ibit Afor complete Dril			AT	tach	ED	
Euhibis A. Daillia	na Dunamana — — — — — — — — — — — — — — — — — —		XHIBITS		1 11 1	0 D: 1	
Exhibit A: Drillin	~ ~	bit D: Surv	-			G: Rig Layout	
Exhibit B: H ₂ s Pla Exhibit C: Surfac		bit E: Loca			xhibit	H: BOP Layout	
	ROPOSED PROGRAM: If proposal is	bit F: Exist			and prope	seed new productive some If-	annanal is to doill
or deepen directionally, give	pertinent data on subsurface locat	ions and measure	ed and true v	ertical depths. Give l	olowout p	reventer program, if any.	Toposar is to drill
signed only	Dones	тітсе Реі	rmit Agei			ation (CO143	2-3-05
Bonita L.	L. Jones, RPL (Bonnie)						
(This space for Federal or S	State office use)						
				PROVAL DATE			
Application approval does conduct operations thereon CONDITIONS OF APPROVAL	not warrant or certify that the applIF ANY:	icant holds legal ACTING	or equitable	title to those rights in	the subj	FEB 0 6 20	ne applicant to
APPROVED BY	s/Joe G. Lara	TITLE FIE	LD M	ANAGER	DA	TED U U ZI	

APPROVAL FOR 1 YEAR *See Instructions On Reverse Side APPROVAL FOR 1 YEAR
Title 18 U.S.C. Section 1001, makes 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.

EXHIBIT "A" Lockhart A-27 # 17

DRILLING PROGRAM

I. The geological surface formation is recent Permian with quaternary alluvium and other surficial deposits.

II. Estimated Tops of Geological Markers:

FORMATION	<u>DEPTH</u>
Quaternary alluvials	Surface
Rustler	1,188'
Yates	2,535'
Queen	3,335'
Grayburg	3,663'
San Andres	3,891'
Glorieta	5,083'
Blinebry	5,514'
Tubb	6,006'
Drinkard	6,338'
Abo	6,615'
TD	7,400'

III. Estimated depths at which water, oil, gas, or other mineral-bearing formations are expected to be encountered:

SUBSTANCE	<u>DEPTH</u>
Oil	Grayburg @ 3663'
	San Andres @ 3891'
	Blinebry @ 5514'
	Tubb @ 6006'
	Drinkard @ 6338'
_	Abo @ 6615'
Gas	Blinebry @ 5514'
	Tubb @ 6006'
Fresh Water	None anticipated

All fresh water and prospectively valuable minerals (as described by BLM) encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows within zones of correlative rights will be tested to determine commercial potential.

V. A. <u>Proposed Casing Program:</u>

	CASING		<u>WEIGHT</u>			ESTIMATED TOC -
<u>HOLE</u>	<u>SIZE</u>		<u>PER</u>		SACKS	REMARKS
SIZE	OD / ID	<u>GRADE</u>	<u>FOOT</u>	DEPTH	CEMENT	
12 1/4"	8 5/8"	J55 STC	24#	1300'	600	TOC - Surface
	8.097"					8.9 ppg Water-based
						Mud;
						90 ° F Est. Static
						Temp;
						84 ° F Est. Circ. Temp.
7 7/8"	5 ½"	J55 LTC	17#	7400'	1,400	TOC – Surface
	4.892"					Float Collar set @
						7355'/ 10.10 ppg
						Brine Mud;
						140 ° F Est. Static
						Temp;
						117 ° F Est. Circ.
						Temp.

&B. Proposed Cement Program:

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	LEAD	SLURRY		TAIL S	LURRY	DISPLACEMENT
CASING						
8 5/8"	400 sacks 35:6				C Cement + 2	
	Cement + 2%				Chloride + 0.12	25 @ 8.33 ppg
	Chloride + 0.2			s/sack Cello F	lake + 56.3%	
	Flake + 0.003		6% Fr	esh Water		
	bwoc Bentonii	_			ol. Cu Ft	
	752.0 Vol. Cu		CI		ol. Factor	
		Vol. Factor		urry Weight (p		
	Slurry Weight	410		urry Yield (cf/		. .
	Slurry Yield (c	•	-		Water (gps)6.3	
	Amount of Mix	,	, n.	c (HH:MM)-3	ing Time – 70	
		ted Pumping 7			:00;	
	= 10 Be	<u>C (HH:MM)-4</u>	<u>::00;</u>			
10.00				ig: Volume Ca		
1260		0.4127 cf/f		100% exces		1040.0 cf
40 ft		x 0.8214 c		n 0% excess	=	32.9 cf
40 ft	X	0.3576 cf/f		0% excess	==	14.3 cf (inside pipe)
		TOTAL SI	LURRY V	OLUME	=	1087.2 cf
	20.0 5.5.1. 397				=	193.6 bbls
pacer		ater @ 8.33 pp	og			
CASING		SLURRY		TAIL SL		DISPLACEMENT
5 ½"	850 sacks (50:5			sacks (50:50)		171 bbls 2% Kcl Water
	Ash): Class C):Class C Cem		@ 8.43 ppg
	bwow Sodium			w Sodium Chl	loride +0.003	
	lbs/sack Cello			FP-6L		
	FP-6L + 10% b		e	580.5 Vol	. Cu Ft	
	2074 1				Y	
	2074 V		Class	1.84 Vol.		
	2.66 V	ol. Factor		ry Weight (ppg	g) 14.2	
	2.66 V Slurry Weight	ol. Factor (ppg) 11.8	Slur	ry Weight (ppg ry Yield (cf/sa	g) 14.2 ck) 1.29	
	2.66 V Slurry Weight (Slurry Yield (c	ol. Factor (ppg) 11.8 f/sack) 2.44	Slur Amo	ry Weight (ppg ry Yield (cf/sa ount of Mix W	g) 14.2 ck) 1.29	
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	2.66 V Slurry Weight (Slurry Yield (c Amount of Mix 14.07;	fol. Factor (ppg) 11.8 f/sack) 2.44 x Water (gps)	Slur Amo Amo	ry Weight (ppg ry Yield (cf/sa ount of Mix W 5.91; ount of Mix Fl	g) 14.2 ck) 1.29 ater (gps) uid(gps) 5.91;	
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	2.66 V Slurry Weight (Slurry Yield (c Amount of Mix 14.07; Amount of Mix 14.07	fol. Factor (ppg) 11.8 f/sack) 2.44 k Water (gps) k Fluid (gps)	Slur Amo Amo Estir I	ry Weight (ppg ry Yield (cf/sa ount of Mix W 5.91; ount of Mix Fl	g) 14.2 ck) 1.29 ater (gps) uid(gps) 5.91; g Time – 70	
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	2.66 V Slurry Weight (Slurry Yield (c Amount of Mix 14.07; Amount of Mix 14.07 Estimated Pum BC (HH:M	fol. Factor (ppg) 11.8 f/sack) 2.44 k Water (gps) k Fluid (gps) pping Time – 7 M)-4:00;	Slur Amo Amo Estin 10	ry Weight (ppg ry Yield (cf/sa ount of Mix W 5.91; ount of Mix Flomated Pumpin BC (HH:MM)	g) 14.2 ck) 1.29 ater (gps) uid(gps) 5.91; g Time – 70 -3:00;	250.46
130	2.66 V Slurry Weight (c Slurry Yield (c Amount of Mix 14.07; Amount of Mix 14.07 Estimated Pum BC (HH:M	fol. Factor (ppg) 11.8 f/sack) 2.44 x Water (gps) x Fluid (gps) ping Time – 7 M)-4:00;	Slur Amo Estin I O 5 ½" Casing 926 cf/ft	ry Weight (ppg ry Yield (cf/sa ount of Mix W 5.91; ount of Mix Flo mated Pumpin BC (HH:MM)- g: Volume Calc with 0%	g) 14.2 ck) 1.29 ater (gps) uid(gps) 5.91; g Time – 70 -3:00; culations:	250.4 cf
130 380	2.66 V Slurry Weight (Slurry Yield (c Amount of Mix 14.07; Amount of Mix 14.07 Estimated Pum BC (HH:M	fol. Factor (ppg) 11.8 f/sack) 2.44 x Water (gps) x Fluid (gps) pping Time - 7 M)-4:00; x 0.14 x 0.15	Slur Amo Estin 10 5 ½" Casin 926 cf/ft 733 cf/ft	ry Weight (ppg ry Yield (cf/sa bunt of Mix W 5.91; bunt of Mix Flount mated Pumpin BC (HH:MM)- g: Volume Calc with 0% with 150%	g) 14.2 ck) 1.29 ater (gps) uid(gps) 5.91; g Time – 70 -3:00; culations: 6 excess =	1646.4 cf
130 380 230	2.66 V Slurry Weight (Slurry Yield (c Amount of Mix 14.07; Amount of Mix 14.07 Estimated Pum BC (HH:M	fol. Factor (ppg) 11.8 f/sack) 2.44 x Water (gps) x Fluid (gps) pping Time - 7 M)-4:00; x 0.14 x 0.11 x 0.11	Slur Amo Estin 10 5 ½" Casing 926 cf/ft 733 cf/ft	ry Weight (ppg ry Yield (cf/sa ount of Mix W 5.91; ount of Mix Flo mated Pumpin BC (HH:MM)- g: Volume Calc with 0% with 150% with 85%	g) 14.2 ck) 1.29 ater (gps) uid(gps) 5.91; g Time – 70 -3:00; culations: 6 excess = 6 excess =	1646.4 cf 577.0 cf
130 380 230	2.66 V Slurry Weight (Slurry Yield (c Amount of Mix 14.07; Amount of Mix 14.07 Estimated Pum BC (HH:M) 0 ft 0 ft	fol. Factor (ppg) 11.8 f/sack) 2.44 x Water (gps) x Fluid (gps) pping Time - 7 M)-4:00; x 0.14 x 0.11 x 0.11	Slur Amo Estin 10 5 ½" Casing 926 cf/ft 733 cf/ft 733 cf/ft 305 cf/ft	ry Weight (ppg ry Yield (cf/sa ount of Mix W 5.91; ount of Mix Flo mated Pumpin BC (HH:MM)- g: Volume Calc with 0% with 150% with 85% with 0%	g) 14.2 ck) 1.29 ater (gps) uid(gps) 5.91; g Time – 70 -3:00; culations: 6 excess =	1646.4 cf

All slurries will be tested prior to loading to confirm thickening times and a lab report furnished to Apache. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.

A. Proposed Mud Program

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<u>DEPTH</u> 0 – 1,300'	MUD PROPERTIES Weight: 8.6 – 9.6 ppg Viscosity: 34 – 36 sec/qt pH: NC Filtrate: NC	REMARKS Spud with a Conventional New Gel/Lime "Spud mud". Use NewGel and native solids to maintain a sufficient viscosity to keep the hole clean. Mix Paper one-two sacks every 100 feet drilled to minimize wall cake build up on water sands and to control seepage loss. At TD of interval, mix in pre-mix pit, 100 barrels of system fluid, NewGel viscosity of 60 sec/100cc, add 0.25 ppb of Super Sweep.
1300' – 5450'	Weight: 9.9 – 10.1 ppg Viscosity: 28 – 29 sec/qt pH: 9-10 Filtrate: NC	Drill out from under the surface casing with Brine Water. Paper should be added at 2 bags after every 100' drilled to control seepage losses. Use Lime to maintain pH at 9-10. Mix one gallon of New-55 at flowline every 250 feet drilled to promote solids settling. Sweep hole with 5-ppb of Super Sweep every 500 feet.
5450' – TD	Weight: 9.9 – 10.1 ppg Viscosity: 30 – 40 sec/qt pH: 9-10 Filtrate: 8-15 cm/30 min	From 5450' to Total Depth, it is recommended the system be restricted to the working pits. Adjust and maintain pH with Caustic Soda. Treat system with Newcide to prevent dacterial degradation of organic materials. Mix Starch (yellow) to control API filtrate at <15 cc/30 min.

VI. <u>Proposed Control Equipment:</u>

Will install on the 8 5/8" surface casing a 9" x 3000 psi WP Double Ram BOP and will test before drilling out of surface casing. As expected pressures will not exceed 2000 psi, we request a waiver of the remote control requirement on the accumulator of the 3M BOP and a variance to run a 2M BOP, if available. See Exhibit "H" for BOP layout.

VII. LAuxiliary Equipment:

9" x 3000 psi double BOP/blind & pipe ram (2M BOP if available)

41/2" x 3000 psi Kelly valve

9" x 3000 psi mud cross – H₂S detector on production hole

Gate-type safety valve 3" choke line from BOP to manifold

2" adjustable chokes – 3" blowdown line

VIII A. Testing Program: None planned

B. Logging Program: The following logs may be run:

CNL, LDT, GR, CAL, DLL, MSFL, NGT, Sonic from TD-1300'

CNL, GR from TD-Surface

- C. Coring Program: None planned
- D. Mudlogging Program: 5,000 TD, Samples every 10 ft
- IX. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. The estimated maximum bottom hole pressure is 2800 psi.

EXHIBIT "B" Lockhart A-27 # 17

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H₂S is anticipated.

EXHIBIT "C"

SURFACE USE AND OPERATIONS PLAN CULTURAL RESOURCES SURVEY APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: LOCKHART A-27 # 17 OPERATOR: APACHE CORPORATION

LOCATION: SE¼NE¼ OF SECTION 27, T21S-R37E, N.M.P.M. LEA COUNTY, NEW MEXICO

SUBMITTED TO:

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT ROSWELL DISTRICT OFFICE 2909 WEST 2ND STREET ROSWELL, NEW MEXICO 88201 TELEPHONE (505) 627-0272

This plan is submitted to provide permitting agencies with information necessary to allow an appraisal of the environmental effects associated with the proposed drilling operations. Within the context of typical drilling operations, this plan provides for protection of surface resources and other environmental components. This plan has been developed in conformity with the United States Geological Survey NTL-6 guidelines, Bureau of Land Management Oil and Gas Order No. l, and in connection and consultation with the private surface owner of record, if other than the United States of America, as well as the Roswell District Office for the Bureau of Land Management and the United States Department of the Interior personnel.

PART #1:

1) Surface Location:

SE¼NE¼ of Section 27, Township 21 South, Range 37 East, N.M.P.M. Lea County, New Mexico 2310' FNL, 330' FEL, Lot H

See attached Exhibits "D" and "E"

2) Bottom Hole Location:

SE¹/4NE¹/4 of Section 27, Township 21 South, Range 37 East, N.M.P.M.

Lea County, New Mexico

2310' FNL, 330' FEL, Lot H

See attached Exhibits "D" and "E"

3) <u>Leases Issued:</u>

LC-032096A

4) Record Lessee:

Apache Corporation 25% Conoco Phillips 50% Chevron 25%

(Acres in Lease:

Township 21 South, Range 37 East, NMPM

Section 17: E½NE¼, W½SW¼, NE¼SE¼

Section 27: N½

Section 35: NW1/4NW1/4, E1/2NW1/4

Total Acres: 640.00 acres, more or less

6) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in the SE¼NE¼ of Section 27, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

PART #2:

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1) Existing Roads:

Exhibits "E-1" & "E-2" comprise maps showing the proposed well site in relation to existing roads. From the intersection of State Highway #8 and Loop 207 in Eunice, New Mexico, go north on Loop 207 for approx. 1.0 mile. Then turn right on Continental Road, go 0.7 miles East to location as illustrated on Exhibit "E-2".

2) Planned Access:

- A. <u>Length and Width:</u> Existing lease/access roads will be used into the well site. Application for a buried pipeline will be made if it becomes necessary.
- B. Construction: The existing roads will be lightly graded and topped with compacted caliche as needed.
- C. Turnouts: None required.
- D. Culverts: None required.
- E. Cuts and Fills: As needed.
- F. Gates and Cattleguards: None required.

3) <u>Location of Existing Wells:</u>

Exhibit "F" shows existing wells within a 1-mile radius of the proposed well.

4) Location of Existing and/or Proposed Facilities:

- A. There are production facilities within the area of the Lockhart A-27 lease.
- B. If the oil well proves to be commercial, any necessary production facilities will be installed on the drilling pad, and flow lines will be installed along the proposed and existing roads to the production facilities and storage tanks. See Exhibit "E-3" for flow-line route.

5) Location and Type of Water Supply:

Apache Corporation plans to drill the proposed well with fresh and brine water which will be transported by truck over proposed and existing access roads.

6) Source of Construction Materials:

Caliche for surfacing access roads and the wellsite pad will be obtained from the location itself or from BLM pits in the area.

7) Method of Handling Waste Material:

- 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. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system.
- E. Oil produced during operation will be stored in tanks until sold.
- F. Apache Corporation will comply with current laws and regulations pertaining to the disposal of human waste.
- G. All waste materials will be contained to prevent scattering by the wind and will be removed from the well site within 30 days after drilling and/or completion operations are finished.

8) Ancillary Facilities: None planned.

9) Well Site Layout:

- A. Exhibit "G" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area have been staked and flagged.
- B. Mat Size: 150' x 220' plus reserve pits as shown on Exhibit "G".
- C. Cut & Fill: Only minor leveling of the drilling site is anticipated.
- D. The surface will be topped with compacted caliche and the reserve pits will be lined with 12 mil plastic.

10) Plans for Restoration of the Surface:

- A. After completion of drilling and/or completion operations, all equipment and other material, not needed for operations, will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, Apache Corporation will comply with all rehabilitation and/or vegetation requirements of the Bureau of Land Management, and such rehabilitation will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11) Other Information:

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- A. <u>Topography:</u> The wellsite and access road are located in the Querecho Plains and are relatively flat.
- B. <u>Soil:</u> The proposed location, access road and production facilities consist of sandy soil. Slope in the proposed area ranges from zero (0) to five (5) degrees.
- C. <u>Flora and Fauna:</u> Vegetation is one of a grassland environment and a scrub-grass, scrub disclimax community. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: There are no ponds, lakes, streams or feeder creeks in the immediate area.
- E. <u>Residences and Other Structures:</u> There are no occupied residences or other structures on or near the proposed location.
- F. Land Use: The land is used for grazing cattle.
- G. <u>Surface Ownership:</u> The surface is owned by Richard Don Jones, P.O. Box 21, Eunice, NM, 882312, 505/394-0803. A surface owner's damage agreement is currently being negotiated.
- H. Archaeological, Historical, and Other Cultural Sites:

Don Clifton, Archaeological Consultant, of Pep, New Mexico, will be conducting an archaeological survey of the proposed well, which covers the drilling location, production facilities, and access road, including a corridor along said access road for power and flow lines. His report will be filed under separate cover.

I. Senior Representative (Manager, Engineering & Production):

Ross Murphy Apache Corporation Suite 1500 – Two Warren Place 6120 South Yale Avenue Tulsa, Oklahoma 74136 (918) 491-4834

Project (Operations Engineer):

Kevin Mayes Apache Corporation Suite 1500 – Two Warren Place 6120 South Yale Avenue Tulsa, Oklahoma 74136 (918) 491-4972

Drilling Operations (Operations Engineer):

Glenn Bone Apache Corporation Suite 1500 – Two Warren Place 6120 South Yale Avenue Tulsa, Oklahoma 74136 (918) 491-4907

CERTIFICATION

I hereby certify that Apache Corporation has inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 Apache 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.

Bonita L. L. Jones, RPL, Consulting Landman

Agent for Apache Corporation

P. O. Box 8309

Roswell, New Mexico 88202-8309

(505) 624-9799 FAX (505) 624-9799

E-Mail: blljones@plateautel.net

Date: 12-3-05

State of New Mexico

Exhibit D-1

DISTRICT' I 1625 N. PRENCH DR., HOBBS, NM 86240

Energy, Minerals and Natural Resources Department

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NN 68210

OIL CONSERVATION DIVISION
1220 SOUTH ST FRANCIS DR

Revised JUNE 10, 2003 Submit to Appropriate District Office

on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

Date Surveyed Seel 510 Surveyor O. William Surveyor O. William Seel St. Surveyor O. William Seel Surveyor O. William Seel

Signature & Scal 5/D Signature

Certificate No. GARY EDSON

12641

State Lease - 4 Copies

Form C-102

Santa Fe, New Mexico 87505								Fee Lease	- 3 Copies
1000 Rio Braxos R DISTRICT IV	ki., Aztec, Ni		WELL TO	CATION	AND ACDEA	GE DEDICATION	ON DIAT		
1220 S. ST. FRANCIS I	OR., SANTA FE,	NM 87505	WELL LO	CATION	AND ACKEA	GE DEDICATIV		☐ AMENDE	ED REPORT
	Number			Pool Code	4		Pool Name		
30-	025-	37694	6	2700	Ì	Wantz	; Abo		_
Property (Property Nam	e		Well Num	
354	13			1	LOCKHART A	-27		17	
OGRID N	OGRID No. Operator Name							Elevatio	_
O873 APACHE CORPORATION							3394	1'	
		<u> </u>			Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	27	21-S	37-E		2310	NORTH	330	EAST	LEA
			L	Hole Loc	cation If Diffe	rent From Sur	face		<u> </u>
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s Joint o	or Infill Co	nsolidation	Code Or	der No.	<u> </u>	l		
40.00	7								
NO ALLO	OWABLE V					UNTIL ALL INTE		EEN CONSOLID	ATED
	 	OR A I	NON-STAN	IDARD UN	NIT HAS BEEN	APPROVED BY	THE DIVISION		
				1		· · · · · · · · · · · · · · · · · · ·	OPERATO	OR CERTIFICA	ΓΙΟΝ
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						Ì	1 1	y certify the the it n is true and comp	-
							11	vledge and belief.	
					i	İ			
	1			i		ا			}
					1	2310'	Kans	Willia	ms)
IL				<u> </u>			Signature		
				GEO	DETIC COORDIN	ATES	Lana	William Pept Cle	15
				1	NAD 27 NME		Printed Nam	ie (a l	10
[]		1		1	Y=529721.3 N	,	<u>Sr. L</u>	ept Clei	<u> </u>
		1		I	X=867218.6 E	1	Title	6/05	
		i		1	* ***************************	 	Date	4100	
				1 -	T.=32°27′02.48′ G.=103°08′34.4		30' Date		
		i		LON	G.=103 08 34.4.		11	OR CERTIFICA	TION
				\top			I hereby corti	he that the well loca	ution shown

liom 3160-5 (June 1990)

UNITED STATES OCD-HOBBS DEPARTMENT OF THE INTERIOR

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

BUREAU OF LAND MANAGEMENT

Expires March 31, 1993

5. Lease Designation and Serial No.

Lease Designation and Serial No.
NMLC-032096A

7. If Unit or CA, Agreement Designation

SUNDRY	NOTICES	AND REPOR	RTS ON WELLS

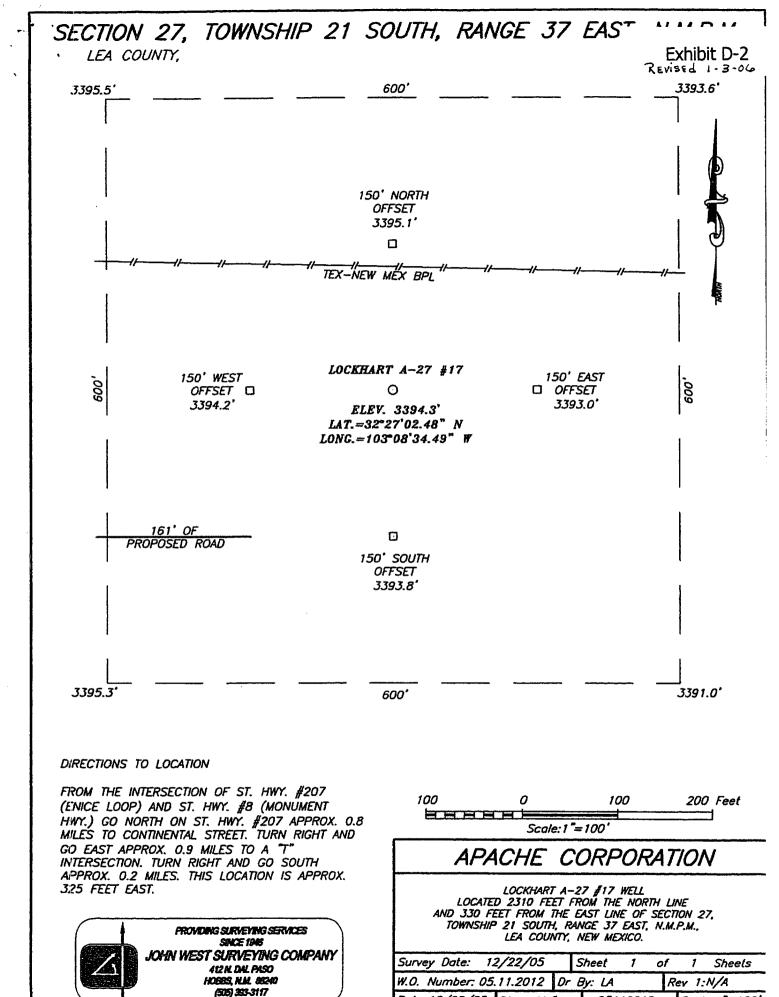
Do not use this form for proposals to drill or to deepen or re-entry to a different reservoir.

Use "APPLICATION FOR PERMIT - " for such proposals.

6. If Indian, Allottee or Tribe Name

SUBMIT IN	TRIPLICATE	7. If Ollit of CA, Agreement Designation
1. Type of Well X Oil Gas		8. Well Name and No.
Well Well Other		Lockhart A-27 #17
2. Name of Operator Apache (Corporation	9. API Well No.
3. Address and Telephone No. Agent: Bonnie Jones, I	P.O.Box 8309, Roswell,NM 88202 505-624-9799	30-025-
	74136, Glenn Bone 918-491-4907	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey	Description)	Wantz Abo
2310' FNL, 3	30' FEL, Unit H	11. County or Parish, State Lea County, NM
12. CHECK APPROPRIATE BOX(S)	TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF A	ACTION
X Notice of Intent	Abandonment	Change of Plans
F	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
F	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
ł	Other	Dispose Water (Note: Report results of multiple completion on Well
	pertinent details, and give pertinent dates, including estimated date of st	Completion or Recompletion Report and Log form.)
Apache intends to construct 161' of ne on 12-3-05, failed to account for this ne in relation to the drill site.	w access road to the proposed location for the ew access road. Attached is a revised copy o	is well. The APD, filed with your office f Exhibit D-2, showing the access road
· · · · · · · · · · · · · · · · · · ·		
14. I hereby certify that the foregoing is true and correct. SIGNED Son to Proprie A	TITLE Permit Agent gent, P.O. Box 8309, Roswell, NM 88202-8309	DATE <u>1-3-06</u> .
	ACTING	700-04-7177
(This space for Federal or State office use)		
APPROVED BY /S/ Joe G. Lara CONDITIONS OF APPROVAL, IF ANY:	TITLE FIELD MANAGER	DATE FEB 0 6 2006 .
Title 19 II S.C. Section 1001 makes it a crime for any person	knowingly and willfully to make to any denartment or agency of	the United States any false fictitious or fraudulent

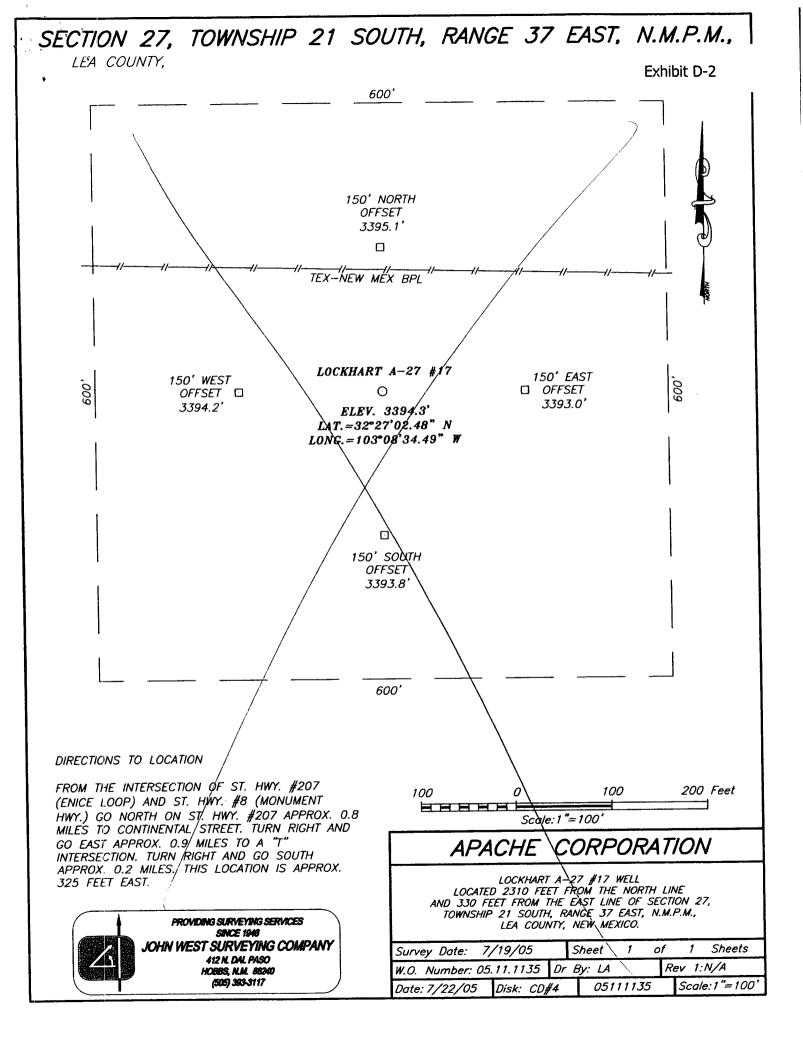
statements or representations as to any matter within its jurisdiction



Date: 12/28/05 | Disk: CD#4

05112012

Scale:1 "=100"



State of New Mexico

DISTRICT I 1625 N. PRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name LOCKHART A-27	Well Number
OGRID No.	Operator Name APACHE CORPORATIO	DN Elevation 3394'

Surface Location

ſ	UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
	Н	27	21-S	37-E		2310	NORTH	330	EAST	LEA

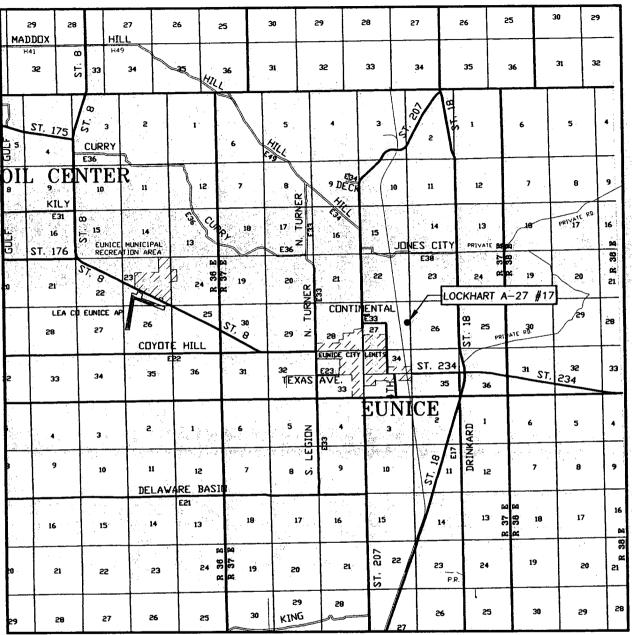
Bottom Hole Location If Different From Surface

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

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

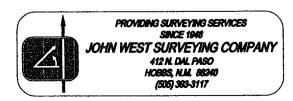
27	26 OPERATOR CERTIFICATION
	I hereby certify the the information contained herein is true and complete to the best of my knowledge and betief.
	S.J. SARKEYS #1 Signature Lana Williams Printed Name SV. Dept. Clerk Title 9/6/05
	Printed Name
LOCKHARD A-27 #11	S.J. SARKEYS #1 Sr. Dept. Clerk
	10A4 Date
	SURVEYOR CERTIFICATION
F.F. HARDISON B #8	J.R. CONE A #2
1	JULY 19, 2005
	Date Surveyed LA
	Signature & Seal of Professional Surveyor
	05.11.1135
	Certificate No. GARY EIDSON 12841
27	26

VICINITY MAP



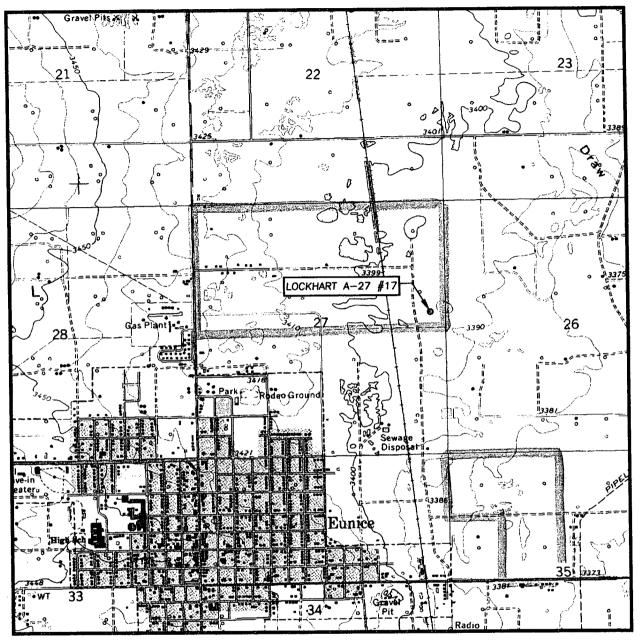
SCALE: 1" = 2 MILES

SEC. 27 T	WP. <u>21-S</u> RGE. <u>37-E</u>
SURVEY	N.M.P.M.
COUNTY	LEA
DESCRIPTION	2310' FNL & 330' FEL
ELEVATION	3394'
OPERATOR	APACHE CORPORATION
LEASE	LOCKHART A-27





LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: EUNICE, N.M. - 10'

SEC. 27 TWP. 21—S RGE. 37—E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2310' FNL & 330' FEL

ELEVATION 3394'

OPERATOR APACHE CORPORATION

LEASE LOCKHART A—27

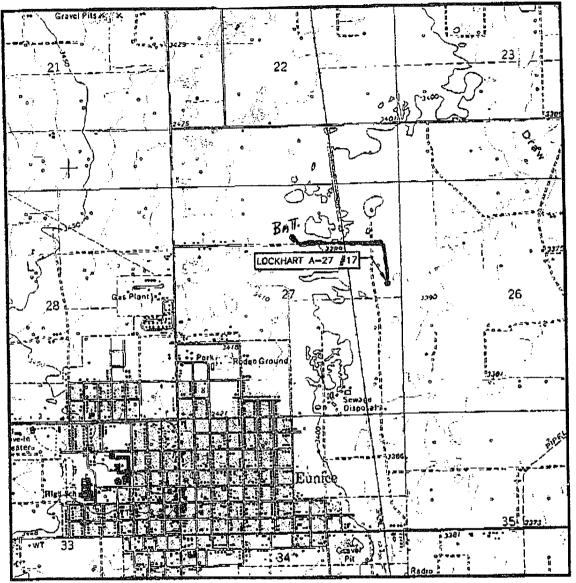
U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.





LOCATION VERIFICATION MAP

Flow Lines



SCALE: 1" = 2000'

CONTOUR INTERVAL: EUNICE, N.M. - 10'

SEC. 27 TWP. 21-5 RGE. 37-E SURVEY N.M.P.M. COUNTY LEA DESCRIPTION 2310' FNL & 330' FEL ELEVATION 3394' OPERATOR APACHE CORPORATION LEASE LOCKHART A-27 U.S.G.S. TOPOGRAPHIC MAP EUNICE, N.M.



PROVIDED SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) \$80-3117

Exhibit "F"

Township 21 South, Range 37 East, NMPM Section 27: SE¼NE¼ 2310' FNL, 330' FEL, Unit H

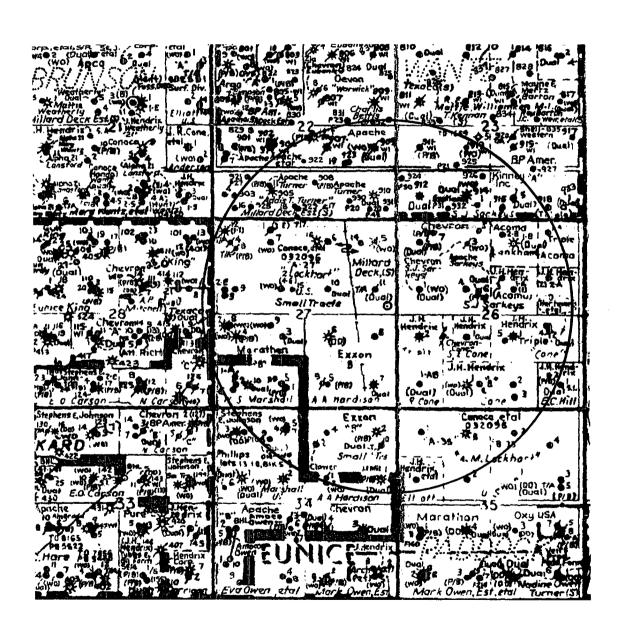
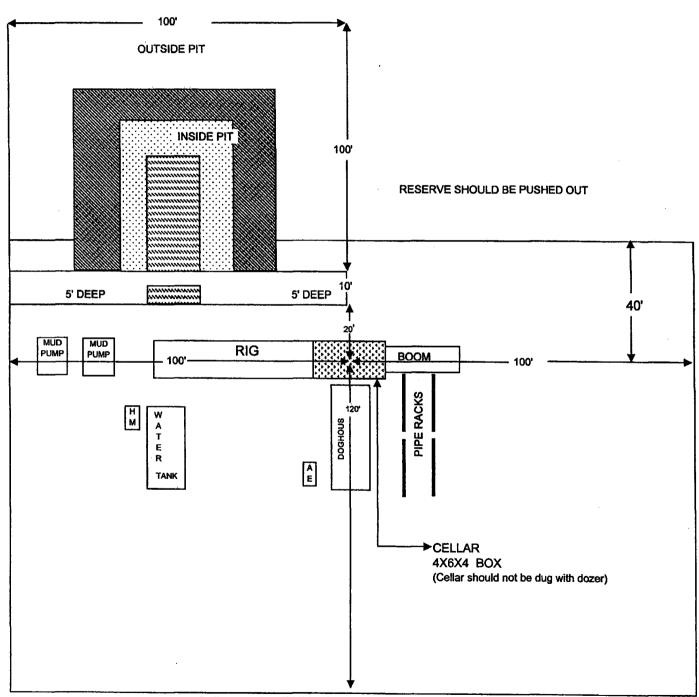


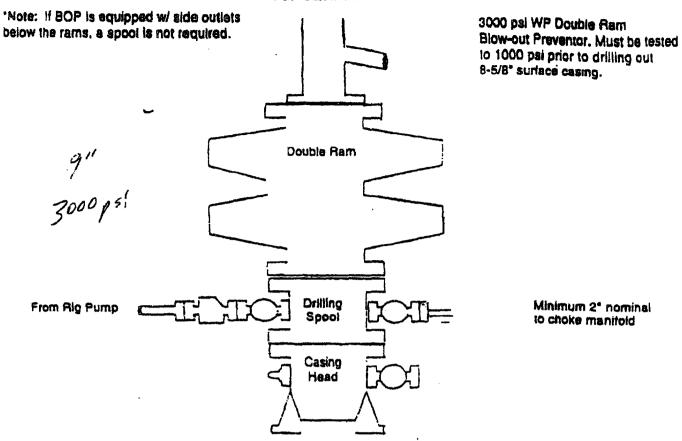
Exhibit G CapStar Drilling, Inc. LOCATION SPECIFICATIONS AND RIG LAYOUT FOR EARTH PITS



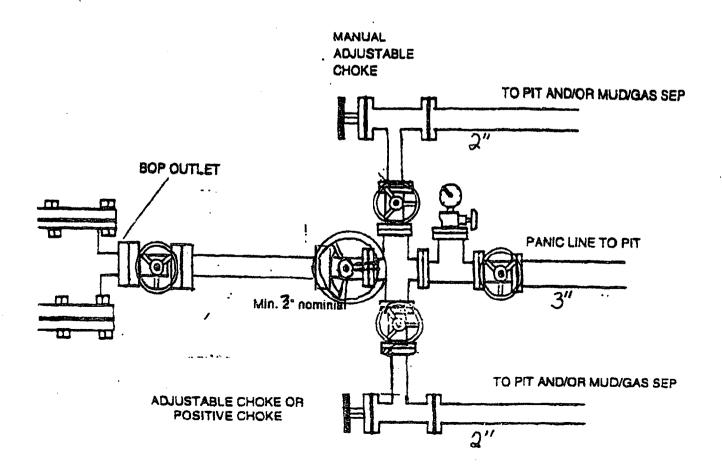
Cellar can be 4X4X4 if using a screw-on wellhead Working Pits dug 5' below ground level

EXHIBIT H

BOP Schemette



Choke Manifold Schematic



SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Apache Corporation Well Name & #:	Lockhart A-27 #17				
Location: 2310 FNL & 330 FEL Sec. 27, T. 21 S., R. 37 E.					
Lease: NMLC032096A County:	Lea State: New Mexico				
The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.					
This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.					
I. SPECIAL ENVIRONMENT REQUIREMENTS					
(X) Lesser Prairie Chicken (stips attached) () Fl () San Simon Swale (stips attached) () On	ood plain (stips attached) ther				
II. ON LEASE - SURFACE REQUIREMENTS PRIO	R TO DRILLING				
(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 () Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.					
(X) Roads and the drill pad for this well must be surfaced w	with 6 inches of compacted caliche.				
() All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximatelyinches in depth. Approximatelycubic yards of topsoil material will be stockpiled for reclamation.					
() Other:					
III. WELL COMPLETION REQUIREMENTS					
() A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.					
(X) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture. See attached seed mixture.					
() A. Seed Mixture 1 (Loamy Sites) Side Oats Grama (Bouteloua curtipendula) 5.0 Sand Dropseed (Sporobolus cryptandrus) 1.0	(x) B. Seed Mixture 2 (Sandy Sites) Sand Dropseed (Sporobolus crptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0 Plains Bristlegrass (Setaria magrostachya) 2.0				
() C. Seed Mixture 3 (Shallow Sites) Side oats Grama (Boute curtipendula) 1.0	() D. Seed Mixture 4 (Gypsum Sites) Alkali Sacaton (Sporobollud airoides) 1.0 Four-Wing Saltbush (Atriplex canescens) 5.0				
() OTHER					

. RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

<u>Reclamation</u>: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall 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 permitted.

BLM SERIAL #: NMLC032096A COMPANY REFERENCE: Apache Corporation WELL # & NAME: Lockhart A-27 #17

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The see mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

^{*}Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the lands described below: All of section 27, T. 21 S., R. 37 E.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Apache Corporation Well Name & No: Lockhart A-27 No. 17

Location: Surface: 2310' FNL & 330' FEL, Sec. 27, T. 21 S., R. 37 E.

Lease: NMLC 032096-A Lea County, New Mexico

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) 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: 8 1/2 inch; 5 1/2 inch;
- C. BOP Tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan shall be in operations 500 feet or three days prior to drilling into the Top of the **Blinbry** estimated to be at 5700 ft.
- 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 8 ½ inch shall be set at 1300 Feet into the Anhydrite and above any Halite encountered, with 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.
- 3. The minimum required fill of cement behind the 5 1/2 inch Production casing is to circulate to surface.

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% 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) shall be 2 M psi.

III. Pressure Control (continued):

- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.
- -The test 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 safe workman-like manner. Hard line connections shall be required.
- -Both low pressure and high pressure testing of BOPE is required.

G Gourley 1/09/2006

BLM Serial #: NMLC032096A

Company Reference: Apache Corporation Well # & Name: Lockhart A-27 #17

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

- A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all

damages to Federal lands resulting there from the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar. The Holder agrees to comply with the following stipulations:

ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

\overline{igsee} Ditching will be required on both sides of the roadway as shown on the
attached map or as staked in the field.

 \square Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, out-sloping, in-sloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval	
0% - 4%	400' - 150'	
4% - 6%	250' - 125'	
6% - 8%	200' - 100'	
8% - 10%	150' - 75'	

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

 \square 400 foot intervals.

foot intervals.

 $\overline{igsqcup}$ locations staked in the field as per spacing intervals above.

 \square locations delineated on the attached map.

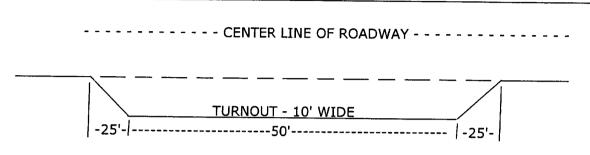
- B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).
- C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

spacing interval =
$$\frac{400'}{\text{road slope in }\%}$$
 + 100

Example: 4% slope: spacing interval = 400 + 100 = 200 feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS:

See reclamation stipulations attached.

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-144 June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closur Is pit or below-grade tank covered by a "general plan"? Yes X No.	\mathbf{e}_{q}'
Is pit or below-grade tank covered by a "general plan"? Yes X No.	<u> </u>

Is pit or below-grade tar	nk covered by a "general plan"? Yes X No or below-grade tank	(30)	
Operator: Apache Corporation (0873) Telephor		nn:bone@ustrapachecorp.com	
Address: 0120 S. Fale Ave., #1500, Tulsa, OK 74150 Facility or well name: Lockhart A-27 #17 API #: 30-025 • 376 94 U/L or Qtr/Qtr H See. 27 V T 21S 4 R 37E			
County: Lea Latitude		8'34.49 W NAD3 1927 2 1983	
Surface Owner: Federal State Private Indian	5	1921 A 1983	
Pit	Below-grade tank		
Type: Drilling A Production Disposal	Volume:bbl Type of fluid:		
Workover	Construction material:		
Lined X Unlined	Double-walled, with leak detection? Yes If not, explain why not.		
Liner type: Synthetic X Thickness 12 mil Clay	The state of the s		
Pit Volume 7105 bbl			
Double to a sound and a final distance from Lance of Six	Less than 50 feet	(20 points)	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	(50 feet or more, but less than 100 feet) 55	(10 points)	
ingli water elevation of ground water.)	100 feet or more	(0 points)	
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)	
water source, or less than 1000 feet from all other water sources.)	No	(0 points)	
	Less than 200 feet	(20 points)	
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)	
iπigation canals, ditches, and perennial and ephemeral watercourses.)	(1000 feet or more)	(0 points)	
	Ranking Score (Total Points)		
If this is a pit closure: (1) Attach a diagram of the facility showing the pit		10 paints	
your are burying in place) onsite offsite forfsite, name of facility		-	
remediation start date and end date. (4) Groundwater encountered: No			
(5) Attach soil sample results and a diagram of sample locations and excava		ft. and attach sample results.	
Additional Comments:	44010		
		2. 420	
		600000	
**************************************		Parties 120	
		9 4, 57	
		Section 2	
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan .			
- t-l- =			
Printed Name/Title Glenn Bone Drilling Eng. Signature			
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or			
otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.			
regulations.			
Approval:			
Printed Name/Title PETROLEUM ENGINEER	Signature	Date:	
		FEB 0 8 2006	