Form 3160-3 (July 1992) .

OCD-HOBBS SUBMIT IN TRIPLICATE \* (Other Instructions on

**UNITED STATES** 

reverse side )

Expires: February 28, 1995 5..LEASE DESIGNATION AND SERIAL NO. NMLC-031741-A

1284	DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	/
APF	LICATION FOR PERMIT TO DRILL (	)R
la TYPE OF WORK		

APPLI	CATION FOR P	ERMIT TO DR		6IF INDIAN, ALLOTTEE OR	TRIBE NAME		
la TYPE OF WORK			_				
DR	$ILL\left[ egin{matrix} \mathbf{X} \end{smallmatrix}  ight]$	DEEPEN				7. UNIT AGREEMENT NAME	
b. TYPE OF WELL		_	<del></del>			8. FARM OR LEASE NAME, WI	FIL NO LA
OIL X GAS			SINGLE	MULTIPLE	X	Hawk A #30	ZZ
2. NAME OF OPERATOR	L OTHER		ZONE	ZONE	<u> </u>	9. API WELL NO.	
	asha Comoration	(CO1462 Pand)	(00)			30- 025-	
	ache Corporation					10. FIELD AND POOL OR WILI	DCAT
3. ADDRESS AND TELEPHO Anache: 6120 S. Yale Ave	ONE NO. Agent: 705 W Me	scalero Rd., Roswell, NR	d 88201 50: Gilbert)	5-624-9799 (Bonnie J	ones)	Eunice; Blinebry-Tubb-Drin	•
4. LOCATION OF WELL (R	eport location clearly and	in accordance with any S	tate requiren	ents.*)		11. SEC., T., R., M., OR BLK.	
	FNL, 1310' FWL, Un					AND SURVEY OR AREA	
At proposed prod. Zon	<sup>e</sup> 1310' FNL, 1310' F	WL, Unit D (NW/	NW¼)			Sec. 9, T21S-R37E, N	NMPM
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		EST TOWN OR POST OFFIC	,e ·			Lea	NM
±3.5 miles North	i of Eunice, Nivi					Los	
15. DISTANCE FROM PROI			16. NO. O	F ACRES IN LEASE	1	D. OF ACRES ASSIGNED	
LOCATION TO NEARE: PROPERTY OR LEASE			560	0.00	1 10	THIS WELL 40.00	
(Also to nearest drlg.			300		<u> </u>	40.00	
18. DISTANCE FROM PROI			19. PROPO	SED DEPTH	20. RC	OTARY OR CABLE TOOLS	
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Exhibit B: H <sub>2</sub> s P		Exhibit E: Loc			xnıdıt	H: BOP Layout	23/
Exhibit C: Surfa		Exhibit F: Exis	_				
IN ABOVE SPACE DESCRIBE or deepen directionally, giv						osed new productive zone. If p preventer program, if any.	roposai is to driii
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PERMIT NO			^	PROVAL DATE	/	2/5/06	
Application approval doe	s not warrant or certify tha	t the applicant holds lega	l or equitable	title to those rights in	the subi	ject lease which would entitle th	he applicant to
	-		•		•		
	T, Pap. Peterson	FIF	ID M	ANAGER	-	SEP 1 5	<b>ZUU</b> 6
APPROVED BY		TITLE FIE				ODDOVAL COS	
		*See instru	ctions On	Reverse Side	. Af	PPROVAL FOR	R 1.YFA

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 arry false. fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**APPROVAL SUBJECT TO** GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED** 



OIL & GAS LAND SERVICES 206 SEP -5 PM 3: 0

RECEIVED

August 31, 2006

Ms. Betty Hill Bureau of Land Management Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220

RE: Application for Permit to Drill
Lease NMLC-031741A
Hawk A-4 #4, Hawk A-5 #4, Hawk A-5 #5
Hawk A #30, Hawk A #31, Hawk A #33
Township 21 South, Range 37 East, NMPM
Lea County, New Mexico

Dear Ms. Hill:

Please be advised that the Surface Owner's Agreement for the Hawk A-4 #4, Hawk A-5 #4, Hawk A-5 #5, Hawk A #30, Hawk A #31, Hawk A #33 wells were executed by Apache Corporation and the Trustee of the Millard Deck Estate, surface owner, on August 31, 2006. It is my understanding that this statement is sufficient for your needs and that you may now proceed with approval of the Applications for Permit to Drill, received by your office on within the past two weeks.

Sincerely,

LIMPUSJONES, LLC

Bonita L. Limpus Jones, RPL

Consulting Landman, Permit Agent for Apache Corporation

/bj Enclosure

## EXHIBIT "A" Hawk A #30 DRILLING PROGRAM

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

II. Estimated Tops of Geological Markers:

<u>FORMATION</u>	<b>DEPTH</b>
Quaternary alluvials	Surface
Rustler	1300'
Yates	2626'
Queen	3478'
Grayburg	3787'
San Andres	4043'
Glorieta	5227'
Blinebry	5689'
Tubb	6189'
Drinkard	6509'
Abo	6795'
TD	6975'

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

SUBSTANCE	<u>DEPTH</u>
Oil	Blinebry@5689'
	Tubb@6189'
	Drinkard@ 6509'
Gas	None anticipated

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.

#### IV. A. Proposed Casing Program:

***	<u>CASING</u>		WEIGHT			ESTIMATED TOC -
<b>HOLE</b>	<u>SIZE</u>		<u>PER</u>		<u>SACKS</u>	<u>REMARKS</u>
SIZE	OD / ID	<u>GRADE</u>	<u>FOOT</u>	<u>DEPTH</u>	<u>CEMENT</u>	
12 1/4"	8 5/8"	J55 STC	24#	1300'	600	TOC - Surface
	8.097"					8.9 ppg Water-based
		Witn	iess Surfa	ce Casing		Mud; 89 ° F Est. Static Temp; 83 ° F Est. Circ. Temp.
7 7/8"	5 ½" 4.892"	J55 LTC	17#	6,975'	1,400	TOC - Surface Float Collar set @ 6930"/ 10.10 ppg Brine Mud; 141 ° F Est. Static Temp; 117 ° F Est. Circ. Temp.

#### B. Proposed Cement Program:

-	LEAD S	SLURRY		TAIL S	LURRY		DISPLACEMENT
CASING							
8 5/8"	400 sacks 35:65 I			sacks Class			80 bbls Fresh Water @
	Cement + 2% bwe			c Calcium C			8.33 ppg
		os/sack Cello Flake	lbs/	sack Cello Fla	ake + 56.3°	% Fresh	
	+ 0.003 gps FP-6	L + 6% bwoc	Wa				
	Bentonite gel				ol. Cu Ft		
	752 Vol. Cu Ft				ol. Factor		
		ol. Factor	Slu	rry Weight (p	pg) 14.8		
	Slurry Weight (pp		Slu	rry Yield (cf/s	ack) 1.35		
	Slurry Yield (cf/s	ack) 1.88		ount of Mix \			
	Amount of Mix V	Vater (gps) 10.7;	Esti	mated Pumpi	ng Time –	70 BC	
	<b>Estimated</b>	Pumping Time -	(HF	H:MM)-3:00;			
	70 BC (H	H:MM)-4:00;					
+				g: Volume Ca			
1260			vith	100% exces	s =		1040.0 cf
40 fl		x 0.8214 cf/ft	with	0% excess	=		32.8 cf
40 fl	t x		with	0% excess	=		14.3 cf (inside pipe)
		TOTAL SLURR	Y VO	LUME	==		1087.1 cf
					=		193.6 bbls
Spacer	20.0 bbls Wate	er @ 8.33 ppg					
CASING	LEAD S	LURRY		TAIL SL	<u>URRY</u>		<u>DISPLACEMENT</u>
5 ½"	950 sacks (50:50)	` • ′		acks (50:50) ]	٠. •		160 bbls 2% Kcl Water
	Class C Cement -			Class C Ceme			@ 8.43 ppg
	Sodium Chloride			m Chloride +	0.003 gps 1	FP-	
	Cello Flake + 0.0		6L				
	10% bwoc Benton			581 Vol.			
	2318 Vo			1.84 Vol.			
	2.66 Vol			Weight (ppg			
	Slurry Weight (pp			Yield (cf/sac			
	Slurry Yield (cf/s			int of Mix Wa			
	Amount of Mix V	Vater (gps)		int of Mix Flu		-	
	14.07;			ated Pumping		BC	
	Amount of Mix F		(I	<b>-1H:MM)-3:0</b> 0	);		
	Estimated Pumpir						
	(HH:MM)-4:	77					
				: Volume Cal			250 4 2
	00 ft	x 0.1926 c			% excess	=	250.4 cf
	75 ft	x 0.1733 c			% excess	=	1694 cf
	00 ft	x 0.1733 c			6 excess	=	609.0 cf
•	40 ft	x 0.1305 c			% excess	==	5.2 cf(inside pipe)
		TOTAL SLURR	Y VO	LUME	=		2558.6 cf
					=		455.67 bbls

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

<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' – 5600'	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.
5600° – TD	Weight: 9.9 – 10.1 ppg Viscosity: 30 – 40 sec/qt pH: 9-10 Filtrate: 8-15 cm/30 min	From 5600' 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 bacterial degradation of organic materials. Mix Starch (yellow) to control API filtrate at <15cc.

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. Auxiliary 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 –  $H_2S$  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: None planned

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 2400 psi.

#### EXHIBIT "B" Hawk A #30

#### HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No  $H_2S$  is anticipated.

#### EXHIBIT "C"

#### SURFACE USE AND OPERATIONS PLAN CULTURAL RESOURCES SURVEY APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: HAWK A #30
OPERATOR: APACHE CORPORATION

LOCATION: NW¼NW¼ OF SECTION 9, T21S-R37E, N.M.P.M. LEA COUNTY, NEW MEXICO

SUBMITTED TO:
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE
620 E. GREENE ST
CARLSBAD, NM 88220
TELEPHONE (505) 234-5972

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. 1, 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:

NW1/NW1/4 of Section 9, Township 21 South, Range 37 East, N.M.P.M.

Lea County, New Mexico

1310' FNL, 1310' FWL, Unit D

See attached Exhibits "D" and "E"

2) Bottom Hole Location:

NW4NW4 of Section 9, Township 21 South, Range 37 East, N.M.P.M.

Lea County, New Mexico

1310' FNL, 1310' FWL, Unit D

See attached Exhibits "D" and "E"

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

Issued: NMLC-031741-A

4) Record Lessee:

Apache Corporation 50% BP America 25% Chevron USA 25%

5) Acres in Lease:

Township 21 South, Range 37 East

Section 4: W½SW¼

Section 5: SE1/4

Section 8: NE'4, N'/2NW'/4

Section 9: W1/2NW1/4

Total Acres: 560.00

#### 6) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in the NW¼NW¼ of Section 9, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

#### **PART #2:**

#### 1) Existing Roads:

Exhibits "E-1" & "E-2" comprise maps showing the proposed well site in relation to existing roads. From the intersection of Highway 8 and Loop Road 207 in Eunice, New Mexico, go 2.7 miles north on 207 and then turn left (west) on Hill Road. Go 1.1 mile, then right (north) 0.1 mile, then right (east) 0.1 mile, then left (north) and go 0.3 to location on left side 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. <u>Construction</u>: 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) Location of Existing Wells:

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

#### 4) <u>Location of Existing and/or Proposed Facilities:</u>

- A. There are production facilities within the area of the Hawk A 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) <u>Location and Type of Water Supply:</u>

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) <u>Method of Handling Waste Material:</u>

- 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 210' 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:

- 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. <u>Land Use:</u> The land is used for grazing cattle.
- G. <u>Surface Ownership:</u> The surface is owned by the Miller Deck Estate, c/o Bank of America NA, attention Tim Wolters, PO Box 270, Midland, TX 79701, 432-685-2064. A surface-damage agreement between Apache Corporation and the Millard Deck Estate is expected to be finalized on or before September 1, 2006.
- 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)**:

Terry Gilbert Apache Corporation Suite 1500 – Two Warren Place 6120 South Yale Avenue Tulsa, Oklahoma 74136 (918) 491-4801

#### **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

LIMPUSJONES, LLC

705 West Mescalero Road

Roswell, New Mexico 88201-5226

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

E-Mail: blljones@plateautel.net

Date: 8-18-06

#### State of New Mexico

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

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT III

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT ☐ AMENDED REPORT 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 Pool Code API Number Eunice: Blinebru-Tubb-Drinkard, North 22900 Property Code 24426 30 HAWK A Operator Name OGRID No. Elevation APACHE CORPORATION 3502 0873

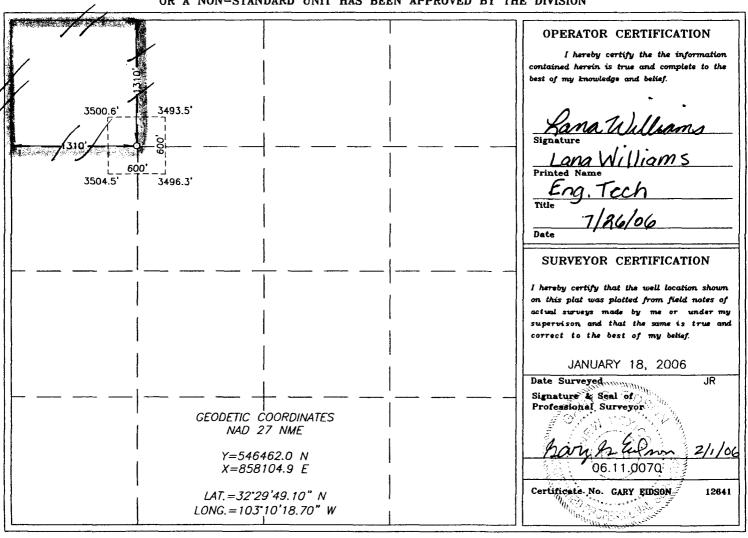
#### Surface Location

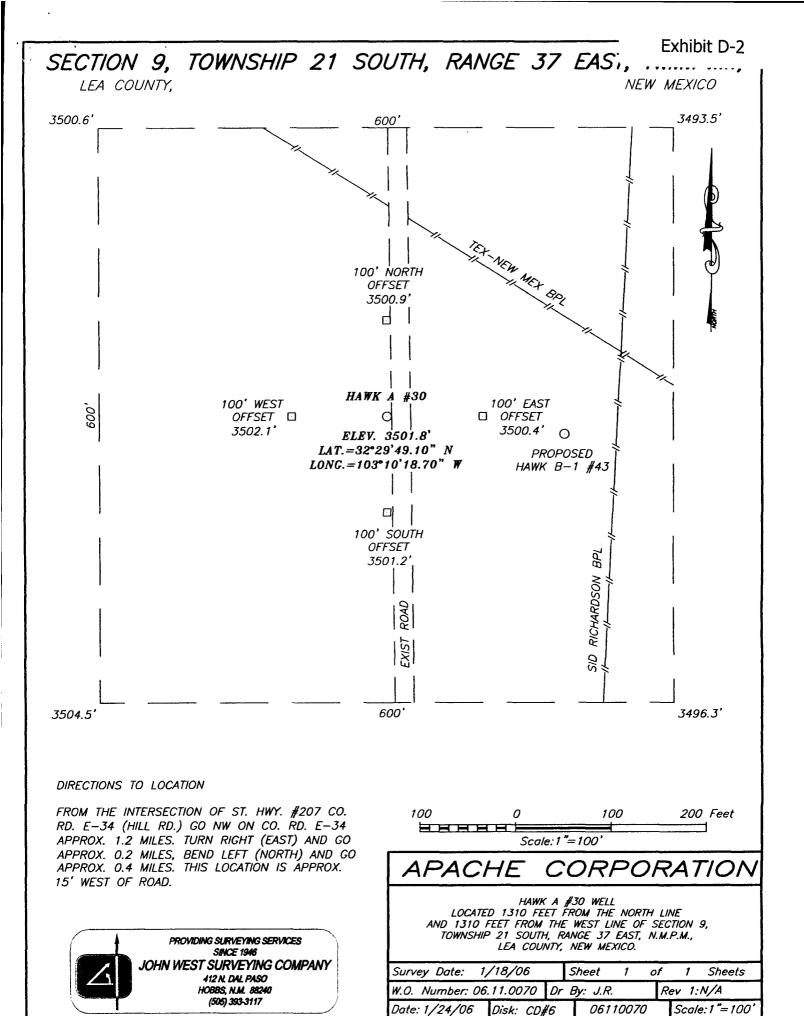
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
D	9	21-S	37-E		1310	NORTH	1310	WEST	LEA

#### 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 Acres	Joint o	or Infill Co	nsolidation	Code Or	der No.	L-5494			

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





#### State of New Mexico

DISTRICT I 1625 N. FRENCH DR., HOBBS, NW 88240

Energy, Minerals and Natural Resources Department

Tono IV. Figure Dist, 10000, IVE Con

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

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 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 API Number Pool Code Pool Name Property Code Property Name Well Number HAWK A 30 OGRID No. Operator Name Elevation APACHE CORPORATION 3502

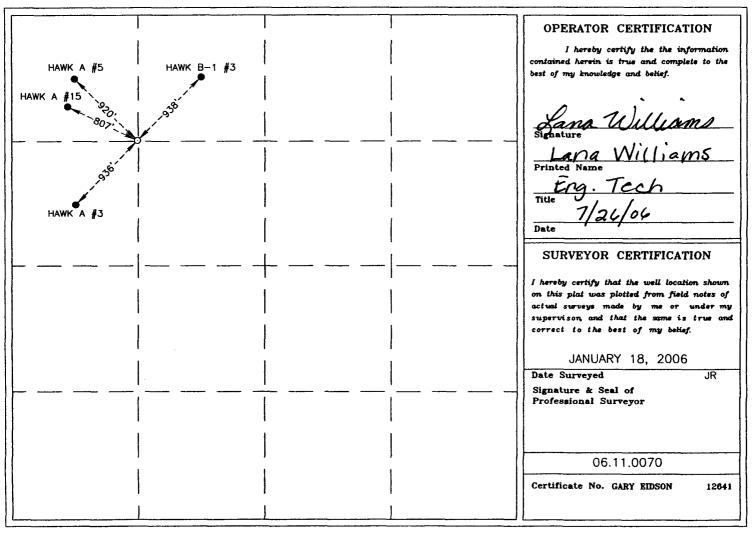
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	9	21-S	37-E		1310	NORTH	1310	WEST	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 Acres	Joint o	r Infill Co	nsolidation (	Code Ore	ier No.		L		I

### 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



## VICINITY MAP

	20	21	55	23		86 19 24	20	0	21	55	53		66 19 66 24	50
	XDDD	28	27 HILL	26	25	30	25	9	29	27	56	25	30	78 68 39 8
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GULF	£31 16 ST. 176	8 15 EUN REC	14 IICE MUNICIPAI REATION AREA	13	P. 18	17 E3	TURNER	16	15	IA	13 TY PRIVATE	16 RD	PRIVATE	20
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9	28	EUNICE 27	26	25	\$7. 30 30	25	- 1-	28 , , , , , , , , , , , , , , , , , , ,	CONTINE	ENTAL 26	ST. 18	PRIVATE RIL	29	28
32	33	34	35	36 36	31	32 T/E	E	MICE CITY 23 VE. 33	LIMITS 34	ST. 2:	$\neg$	31 5	32 234	33
5	4	3	2	1	6	5	LEGIDN	4	3	2	ARD	6	5	4
8	9	10	11 DELA	12 WARE BASI	7	8		9	10	87. 18	DRINKARD	7	8	9
	16	15	14	13 ES1	18		17	16	15	14	13	23 SS 18	17	16
20	51	55	23		M 19	) a	0	21	25	23	24	19	20	N R 38 E

SCALE: 1" = 2 MILES

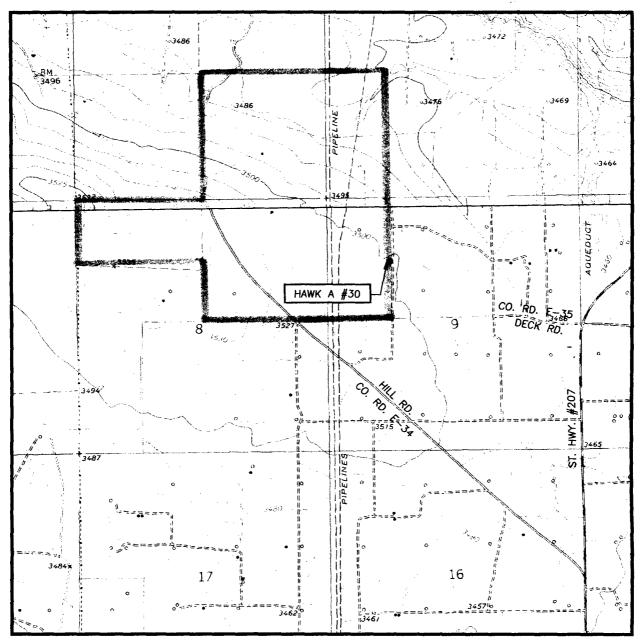
SEC. <u>9</u>	TWP2	<u>21-S</u> F	RGE	<u> 37–1</u>	<u>-</u>
SURVEY		N.M.P.	.м		
COUNTY	LEA	_STATE	E NEW	ME	XICO
DESCRIPTIO	N 131	O' FNL	<u>&amp; 13</u>	310'	FWL
ELEVATION_		35	02,		
OPERATOR.	APACHE CORPORATION				
LEASE		HAWK	Α		



PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117



## LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

HOBBS SW, N.M.

SEC. 9 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1310' FNL & 1310' FWL

ELEVATION 3502'
APACHE

OPERATOR CORPORATION

LEASE HAWK A

U.S.G.S. TOPOGRAPHIC MAP

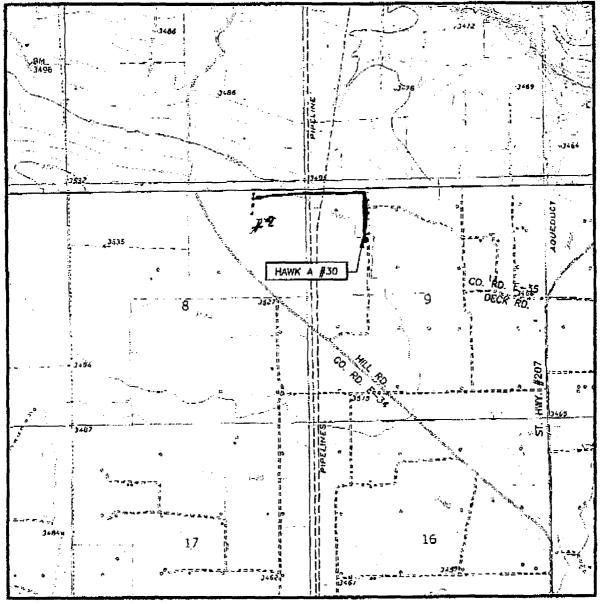
CONTOUR INTERVAL: HOBBS SW, N.M. - 5' EUNICE, N.M. - 10'



PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117

LEASE BOUNDARY

## LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 9 TWP. 21-5 RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1310' FNL & 1310' FWL

ELEVATION \_\_\_\_\_ 3502'

APACHE CORPORATION OPERATOR \_\_\_

HAWK A LEASE\_\_\_\_

U.S.G.S. TOPOGRAPHIC MAP

HOBBS SW, N.M.

CONTOUR INTERVAL: HOBBS SW. N.M. - 5' EUNICE, N.M. - 10'

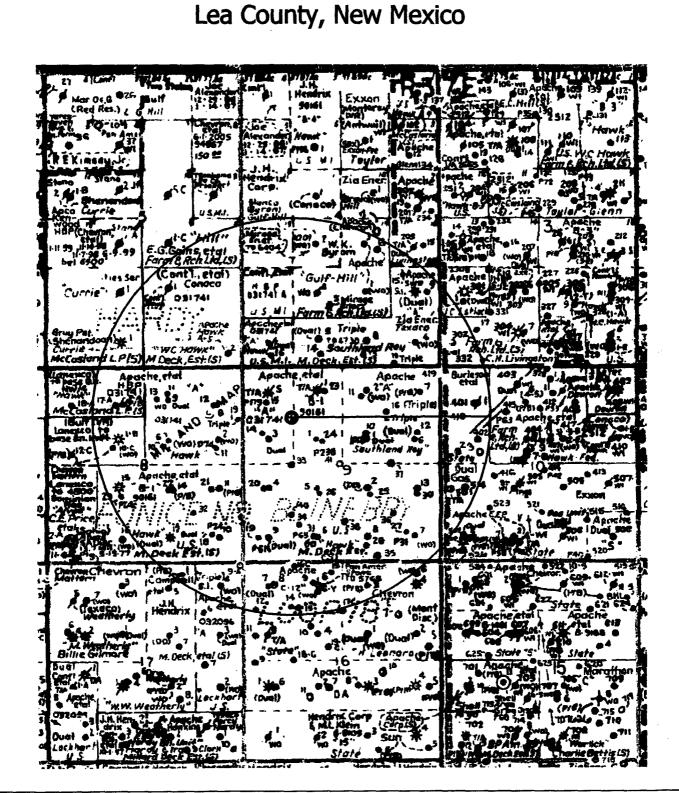


PROVIDING SURVEYING SERVICES SINCE 1948 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS N.M. 85240 (505) 383-3117

Flow Lines

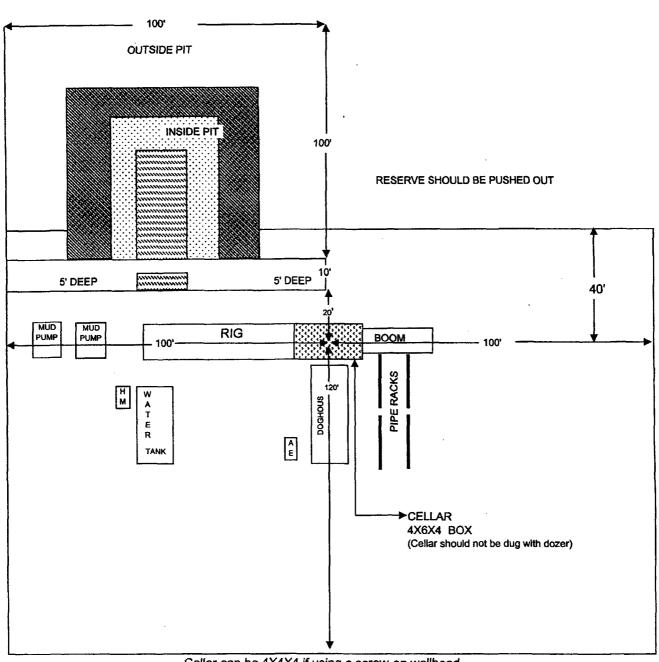
## Exhibit F Hawk A #30

## Township 21 South, Range 37 East, NMPM Section 9: NWNW 1,310' FNL, 1,310' FWL (Unit D)



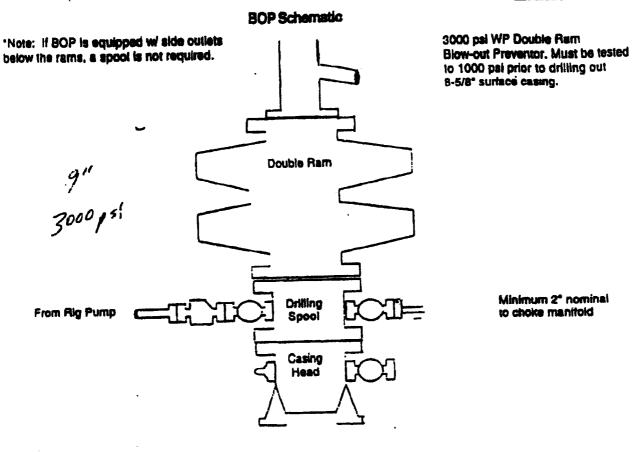
# Exhibit G CapStar Drilling, Inc. LOCATION SPECIFICATIONS AND RIG LAYOUT FOR EARTH PITS

Rig #8

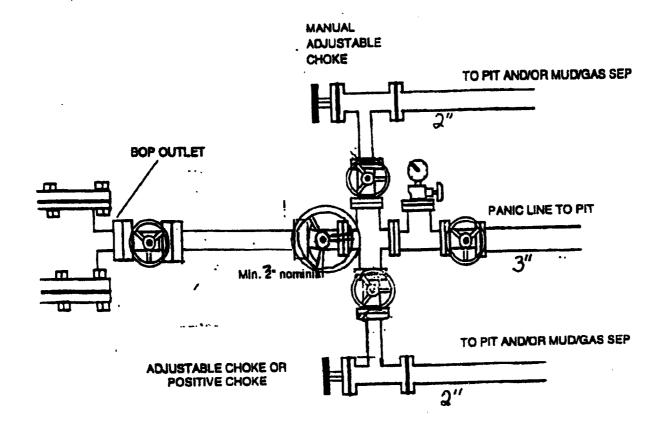


Cellar can be 4X4X4 if using a screw-on wellhead Working Pits dug 5' below ground level

#### Exhibit H



#### Choice Manifold Schematic



#### CONDITIONS OF APPROVAL - DRILLING

Well Name & No.

Hawk A #30

**Operator's Name:** 

**Apache Corporation** 

Location:

1310 FNL, 1310 FWL, Section 9, T-21-S, R-37-E

Lease:

NMLC-031741-A

#### 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) 234-5972 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:

- A. Spudding
- B. Cementing casing: 8-5/8 inch 5-1/2 inch.
- C. BOP tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the <u>Glorieta</u> Formation. A copy of the plan shall be posted at the drilling site. Hydrogen Sulfide has been reported in wells in section 3 and 10 in amounts from 200-800 ppm in gas streams and 400-130,000 in STVs.
- 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 <u>8-5/8</u> inch surface casing shall be set below usable water (25' into the Rustler) 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.

#### Possible lost circulation in the Glorieta.

2. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall circulate</u> 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 <u>8-5/8</u> 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) is 2000 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.

Engineer (after hours): 505-706-2779

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

Form C-144 June 1, 2004

Pit or Below-Grade Tank Registration or Closure
Is pit or below-grade tank covered by a "general plan"? Yes No

Type of action: Registration of a pit of	or below-grade tank 🔲 Closure of a pit or below-gra	ide tank					
Operator: Apache Corporation (0873) Telephon	918-491-4801 e-mail address: tern	ry.gilbert@usa.apachecorp.com					
Address: 6120 S. Yale Ave., #1500, Tulsa, OK 74136							
Facility or well name: Hawk A 30 API #:	30-025·39144 U/L or Qtr/Qtr D	Sec 9 T 21S R 37E					
County: Lea Latitude	Longitude	NAD: 1927 🗌 1983 🗍					
Surface Owner: Federal State Private Indian							
Pit	Below-grade tank						
Type: Drilling A Production Disposal	Volume:bbl Type of fluid:						
Workover	Construction material:						
Lined 🔀 Unlined 🗌	Double-walled, with leak detection? Yes I If not, explain why not.						
Liner type: Synthetic   Thickness   mil Clay    Clay   Clay   Clay   Clay   Clay   Clay   Clay   Clay   Clay    Clay   Clay   Clay   Clay   Clay   Clay   Clay   Clay   Clay	,,,,						
Pit Volume 7105 bbl							
TR VOIGHE // IO/	Less than 50 feet	(20 points)					
Depth to ground water (vertical distance from bottom of pit to sessonal	50 feet or more, but less than 100 feet	1					
high water elevation of ground water.)	100 feet or more	(10 points)					
	100 rect of filote	( o ponts)					
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.)	L <sub>10</sub>	( 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)					
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	( 0 points)					
	1000 feet of fight						
	Ranking Score (Total Points)	10					
If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if							
your are burying in place) onsite 🚺 pffsite 🔲 If offsite, name of facility (3) Attach a general description of remedial action taken including							
remediation start date and end date. (4) Groundwater encountered: No Test If yes, show depth below ground surfaceft. and attach sample results.							
(5) Attach soil sample results and a diagram of sample locations and excavations.							
Additional Comments:							
	<del></del>	· 7,					
ු දුරිල්.							
	V 3 - 4						
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 lank has been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) afternative OCD-approved plan .							
Date: 8-23-66 (1)							
Printed Name/Title Telly Cilbert	Signature	í					
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.							
		<u> </u>					
		_					
Approval: Printed Name/Title CHEUS WILLIAMS   DIST. SUPV	Signature Mus Illell	Manin Date: 12/5/06					