ATS-07-430

OCD-HOBBS

JUN 2007
Received
Hobbs
OCD

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM-90161

6. If Indian, Allotee or Tribe Name

1a. Type of work: [X] DRILL [ ] REENTER UNORTHODOX LOCATION

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No. <24427>
HAWK "B-1" # 58

2. Name of Operator <873>
APACHE CORPORATION (LANA WILLIAMS 918-491-4980)

9. API Well No.
30-025-38493

3a. Address TWO WARREN PLACE SUITE 1500
6120 SOUTH YALE, TULSA, OKLAHOMA 74136-4224

3b. Phone No. (include area code)
(PH-918-491-4980)

10. Field and Pool, or Exploratory
PENROSE SKELLY-GRAYBURG

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 2620' FSL & 1440' FEL SECTION 8 T21S-R37E Unit J
At proposed prod. zone SAME
CAPITAN CONTROLLED WATER BASIN

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 8 T21S-R37E

14. Distance in miles and direction from nearest town or post office*
Approximately 4 miles Northwest of Eunice, New Mexico

12. County or Parish
LEA CO.

13. State
NEW MEXICO

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
20'	958	40 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
861'	4200'	BLM-CO-1463 NATION WIDE
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3524' GL.	WHEN APPROVED	12 days

24. Attachments

NSL-5669

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form.

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer

25. Signature	Name (Printed/Typed)	Date
Joe T. Janica	Joe T. Janica	06/04/07
Title: Agent		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed) /s/ Don Peterson	Date JUN 15 2007
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL 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 Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-38493	50350	PENROSE SKELLY-GRAYBURG

Property Code	Property Name	Well Number
24427	HAWK B-1	58

OGRID No.	Operator Name	Elevation
873	APACHE CORPORATION	3524'

Surface Location

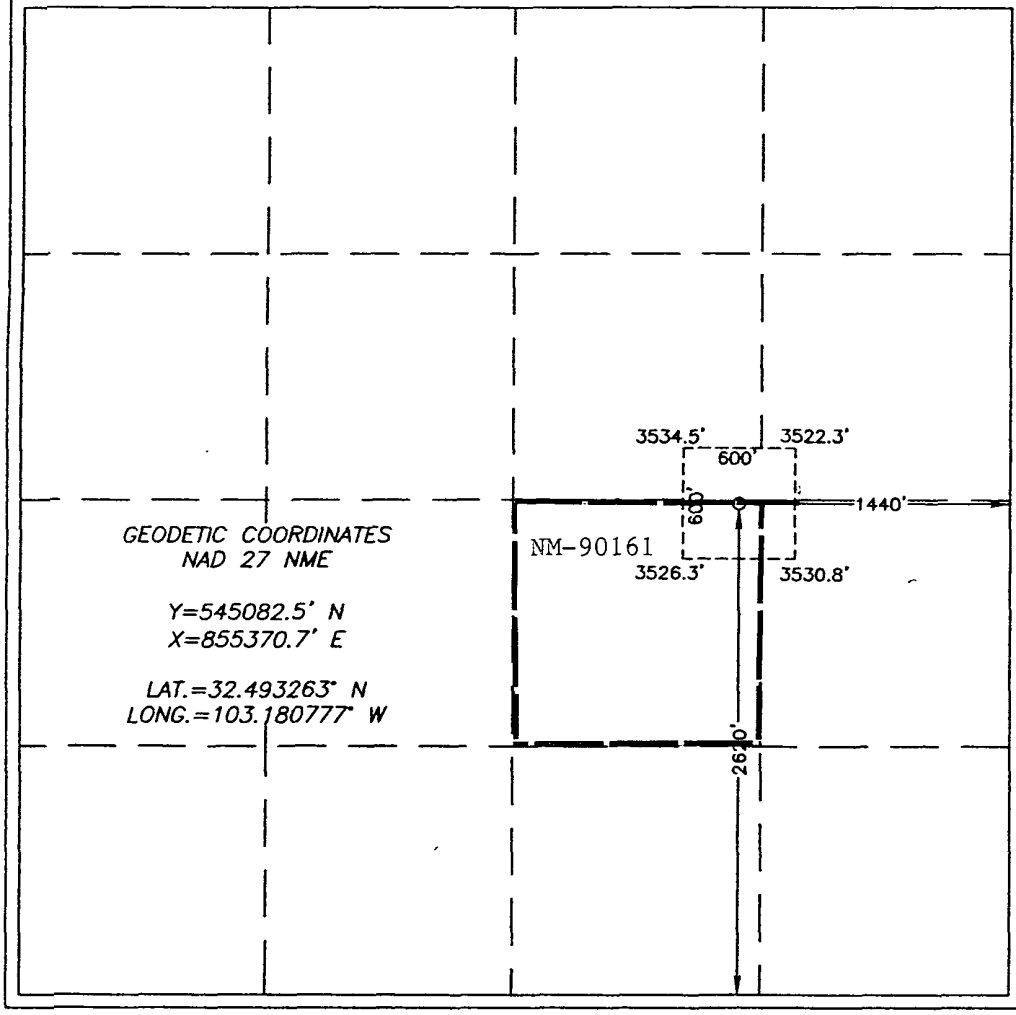
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	8	21-S	37-E		2620	SOUTH	1440	EAST	LEA

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 Acres	Joint or Infill	Consolidation Code	Order No.
40			NSL-5669

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



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Lana Williams 4/10/07
Signature Date

Lana Williams
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MARCH 19, 2007
Date Surveyed AR

Signature & Seal of Professional Surveyor

Ronald J. Eidson 3/27/07
07.11.0325

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

EXHIBIT "A"

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

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

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	HAWK B-1	58
OGRID No.	**Operator Name**	**Elevation**
	APACHE CORPORATION	3524'

Surface Location

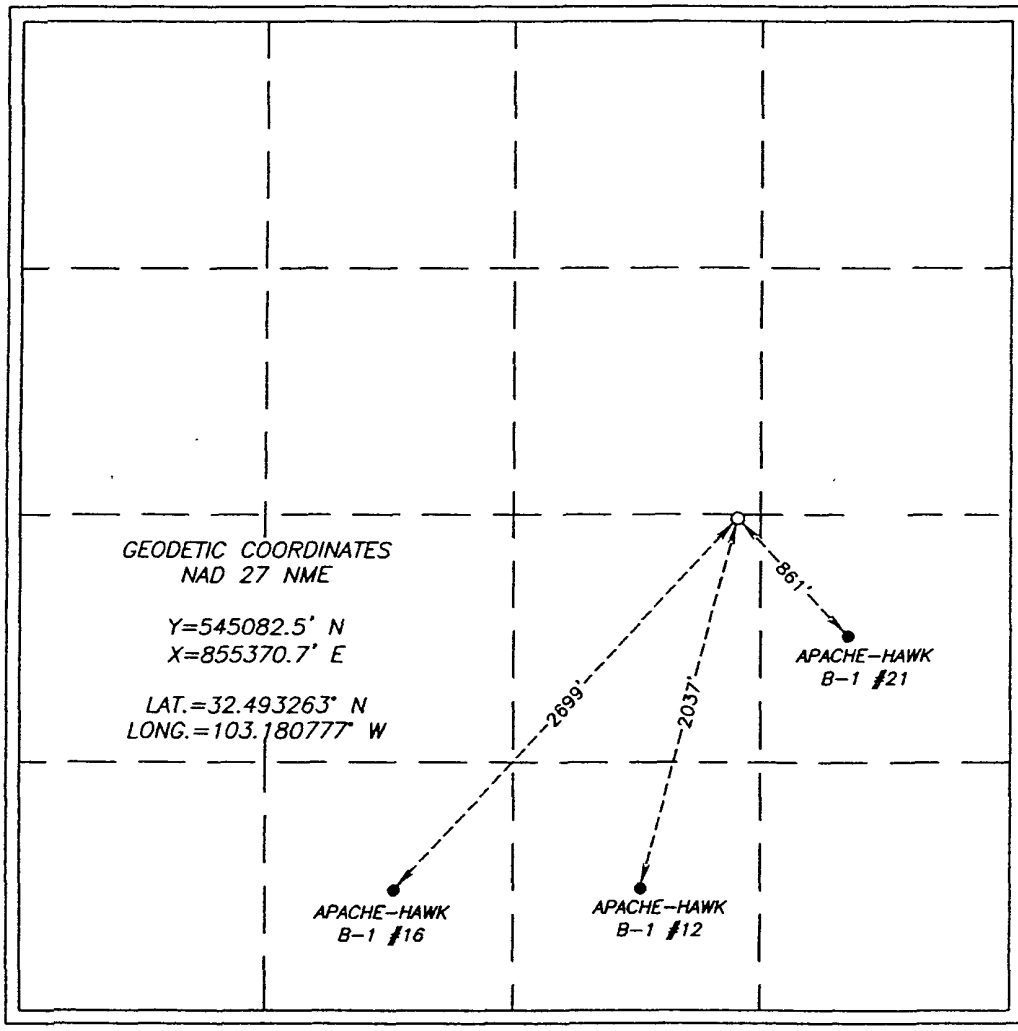
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	8	21-S	37-E		2620	SOUTH	1440	EAST	LEA

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 Acres	Joint or Infill	Consolidation Code	Order 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



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Lana Williams 4/18/07
Signature Date

Lana Williams
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MARCH 19, 2007
Date Surveyed AR

Signature & Seal of Professional Surveyor

07.11.0325

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

APPLICATION TO DRILL

APACHE CORPORATION
HAWK "B-1" #58
UNIT "J" SECTION 8
T21S-R37E LEA CO. NM

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

1. LOCATION: 2620' FSL & 1440' FEL SECTION 8 T21S-R37E LEA CO. NM

2. ELEVATION ABOVE SEA LEVEL: 3524' GL

3. GEOLOGIC NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits.

4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.

5. PROPOSED DRILLING DEPTH: 4200'

6. ESTIMATED TOPS OF GELOOGICAL MARKERS:

Rustler Anhydrite	1318'	Grayburg	3758'
Yates	2722'	Grayburg "B"	3998'
Seven Rivers	2936'	Grayburg "C"	4052'
Queen	3489'	San Andres	4052'
		TD	4200'

7. POSSIBLE MINERAL BEARING FORMATION:

Grayburg	Oil
San Andres	Oil

8. CASING PROGRAM:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
12¼"	0-~~400'~~ 1300'	8 5/8"	24#	8-R	ST&C	J-55
7 7/8"	0-4200'	5½"	17#	8-R	LT&C	J-55

Per Discussion with Apaches Terry Gilbert 6-14-07

Collapse 1.125 Burst 1.00 Tension 1.8 Body 1.5

Per Joe Janica 6-11-07

APPLICATION TO DRILL

APACHE CORPORATION
HAWK "B-1" #58
UNIT "J" SECTION 8
T21S-R37E LEA CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set ~~400'~~ 1300± of 8 5/8" 24# J-55 ST&C casing. Cement with 400 Sx. of Class "C" 35/65POZ cement + 2% CaCl, +6% bentonite GelSlurry weight 14.8PPG Yield 1.34 circulate cement to surface. See COA
5½"	Production	Set 4200' of 5½" 17# J-55 LT&C casing. Cement with 450 Sx. of 50/50 Class "C" POZ + 5% NACL + 1/8# Flocele/Sx, + 10% Bentonite Wt 11.8 PPG & 2.54 Yield. tail in with 400 Sx. of of 50/50 Class "C" POZ + 5% NACL, Slurry wt. 14.2 PPG, Yield 1.35.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "I" shows a 900 Series 3000 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 nipped 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 the drill pipe is out of the hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "I-1" shows a hydraulically operated closing unit and a 3" 5000 PSI working pressure choke manifold with dual adjustable chokes. No abnormal pressure or temperatures are expected while drilling this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-~~400'~~ 1300± See COA	8.6-9.2	34-36	NC	Fresh water Spud Mud use paper to control seepage use high viscosity sweeps to clean hole.
~~400~~ 1300±-3900'	9.0-10.4	32-34	NC	Brine water use paper to control seepage & high viscosity sweeps to clean hole.
3900-4200'	10.0-10.4	34-36	15-20 cc	Same as above use Starch to control water loss, control pH with caustic soda

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 the viscosity and/or the water loss may have to be adjusted to meet these needs.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S detectors, warning system and briefing areas.
   E. Evacuation procedure, routes and first aid.
   F. Proper use of 30 minute pressure demand air pack.

2. H_2S Detection and Alarm Systems

   A. H_2S 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, H_2S 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.

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.

EXHIBIT "B"
Hawk B-1 # 58

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H_2S is anticipated.

Hawk B-1 # 58

DRILLING PROGRAM

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

II. Estimated Tops of Geological Markers:

FORMATION	DEPTH
Quaternary alluvials	Surface
Rustler	1318'
Yates	2722'
Seven Rivers	2936'
Queen	3489'
Grayburg	3758'
Grayburg B	3897'
Grayburg C	3998'
San Andres	4052'
TD	4200'

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

SUBSTANCE	DEPTH
Oil	Grayburg@3758' San Andres@3997'
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:

HOLE SIZE	CASING SIZE OD / ID	GRADE	WEIGHT PER FOOT	DEPTH	SACKS CEMENT	ESTIMATED TOC - REMARKS
12 ¼"	8 5/8" 8.097"	J55 STC	24#	~~400'~~ see COA	400	TOC - Surface 8.9 ppg Water-based Mud; 89 ° F Est. Static Temp; 83 ° F Est. Circ. Temp.
7 7/8"	5 ½" 4.892"	J55 LTC	17#	4,200'	850	TOC – Surface Float Collar set @ 4355"/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp; 104 ° F Est. Circ.

The **Hawk "B" Lease** is NM 90161 and covers the following lands:

Township 21 South Range 37 East	Lessees of Record	
Section 4: Lots 3, 6	Apache Corporation	50%
Section 6: E/2SE/4 SW/4SE/4	BP America Production Company (formerly Atlantic Richfield Co.)	25%
Section 8: E/2SW/4 SE/4	Chevron U S A	25%
Section 9: E/2NW/4, S/2		

Township 20 South Range 37 East
Section 13: SW/4NE/4, NW/4SW/4

Township 20 South, Range 38 East
Section 30: Lot 1

B. Proposed Cement Program:

CASING	LEAD SLURRY	TAIL SLURRY	DISPLACEMENT
8 5/8"	400 sacks 35:65 Poz:Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.003 gps FP-6L + 6% bwoc Bentonite gel 536 Vol. Cu Ft 1.94 Vol. Factor Slurry Weight (ppg) 14.8 Slurry Yield (cf/sack) 1.34 Amount of Mix Water (gps) 6.29; Estimated Pumping Time – 70 BC (HH:MM)-4:00;	NONE	24 bbls Fresh Water @ 8.33 ppg

8 5/8" Casing: Volume Calculations:

360 ft	x	0.4127 cf/ft	with	100% excess	=	148.57 cf
40 ft		x 0.8214 cf/ft	with	0% excess	=	32.8 cf
40 ft	x	0.3576 cf/ft	with	0% excess	=	14.3 cf (inside pipe)
		TOTAL SLURRY VOLUME			=	195.67 cf
					=	34.8 bbls

Spacer 20.0 bbls Water @ 8.33 ppg

CASING	LEAD SLURRY	TAIL SLURRY	DISPLACEMENT
5 ½"	450 sacks (50:50) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.003 gps FP-6L + 10% bwoc Bentonite 1,143 Vol. Cu Ft 2.66 Vol. Factor Slurry Weight (ppg) 11.8 Slurry Yield (cf/sack) 2.54 Amount of Mix Water (gps) 14.72; Amount of Mix Fluid (gps) 14.72 Estimated Pumping Time – 70 BC (HH:MM)-4:00;	400 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride +0.003 gps FP-6L 540 Vol. Cu Ft 1.84 Vol. Factor Slurry Weight (ppg) 14.2 Slurry Yield (cf/sack) 1.35 Amount of Mix Water (gps) 6.34; Amount of Mix Fluid(gps) 6.34; Estimated Pumping Time – 70 BC (HH:MM)-3:00;	100 bbls 2% Kcl Water @ 8.43 ppg

5 ½" Casing: Volume Calculations:

400 ft	x	0.1926 cf/ft	with	0% excess	=	77.04 cf
2450 ft	x	0.1733 cf/ft	with	159% excess	=	1099 cf
1350 ft	x	0.1733 cf/ft	with	85% excess	=	433.0 cf
40 ft	x	0.1305 cf/ft	with	0% excess	=	5.2 cf(inside pipe)
		TOTAL SLURRY VOLUME			=	1614 cf
					=	287 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.

V. A. Proposed Mud Program

DEPTH	MUD PROPERTIES	REMARKS
0 – 400'	Weight: 8.6 – 9.2 ppg Viscosity: 34 – 36 sec/qt pH: NC Filtrate: NC	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.
400' – 3900'	Weight: 9.0 – 10.4 ppg Viscosity: 32 – 34 sec/qt pH: NC 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. Mix one gallon of New-55 at flowline every 250 feet drilled to promote solids settling. Sweep hole with 3-ppb of Super Sweep every 500 feet.
3900' – TD	Weight: 10.0 – 10.4 ppg Viscosity: 34 – 36 sec/qt pH: 9-10 Filtrate: 15-20 cm/30 min	From 3,900' 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 <15cc-20cc.

VI. Proposed Control Equipment:

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 1500 psi.

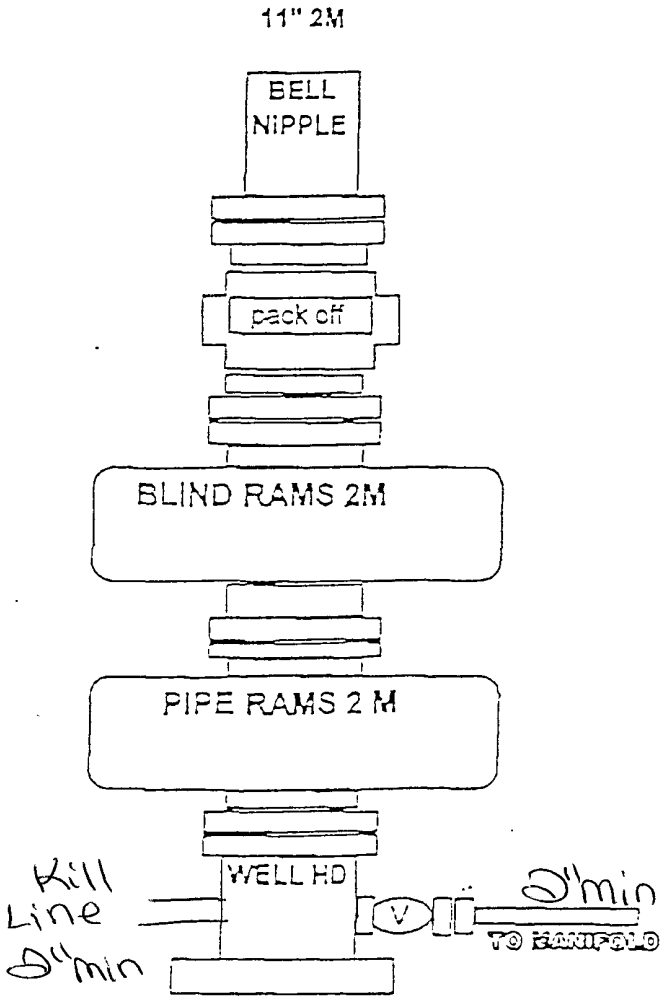


EXHIBIT "G"
SKETCH OF B.O.P. TO BE USED ON

APACHE CORPORATION
HAWK "B-1" #58
UNIT "J" SECTION 8
T21S-R37E LEA CO. NM

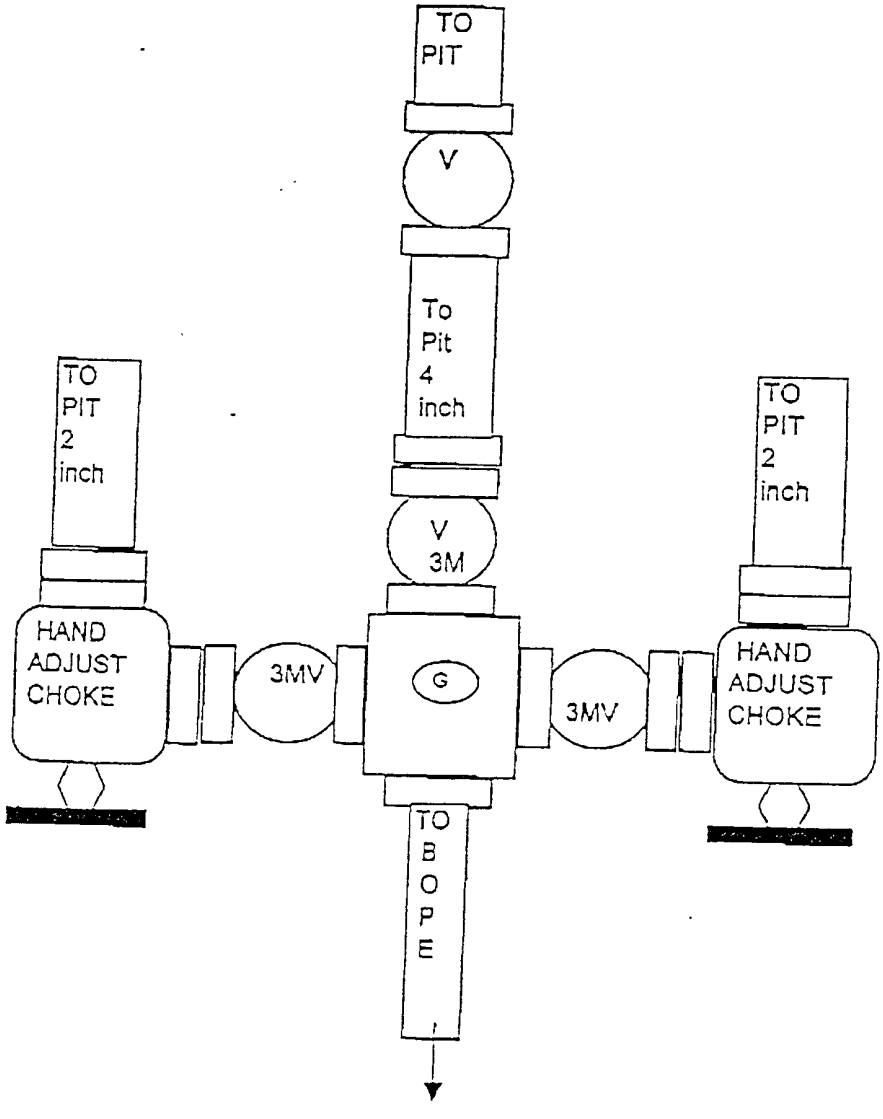
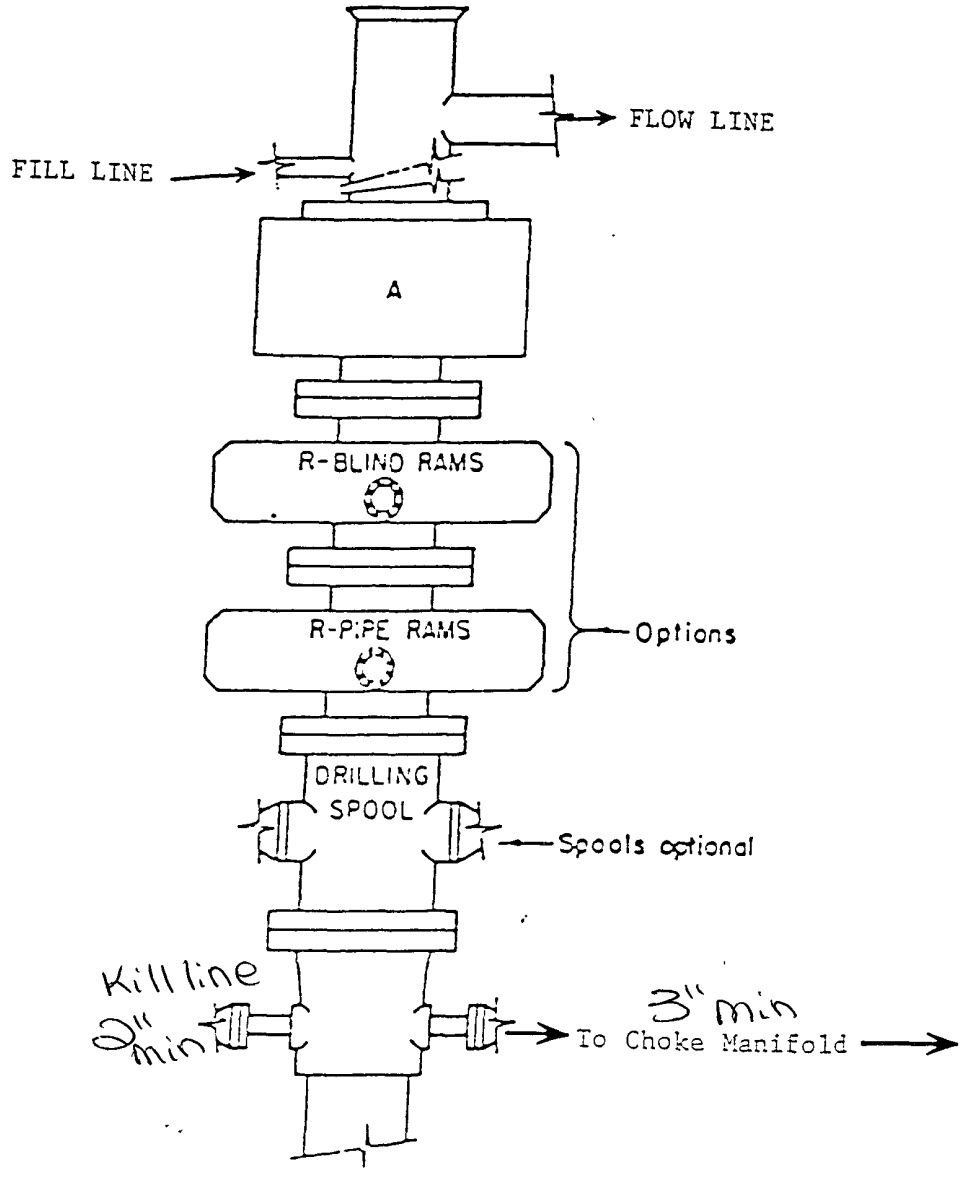


EXHIBIT "H"
CHOKE MANIFOLD & CLOSING UNIT

APACHE CORPORATION
HAWK "B-1" #58
UNIT "J" SECTION 8
T21S-R37E LEA CO. NM

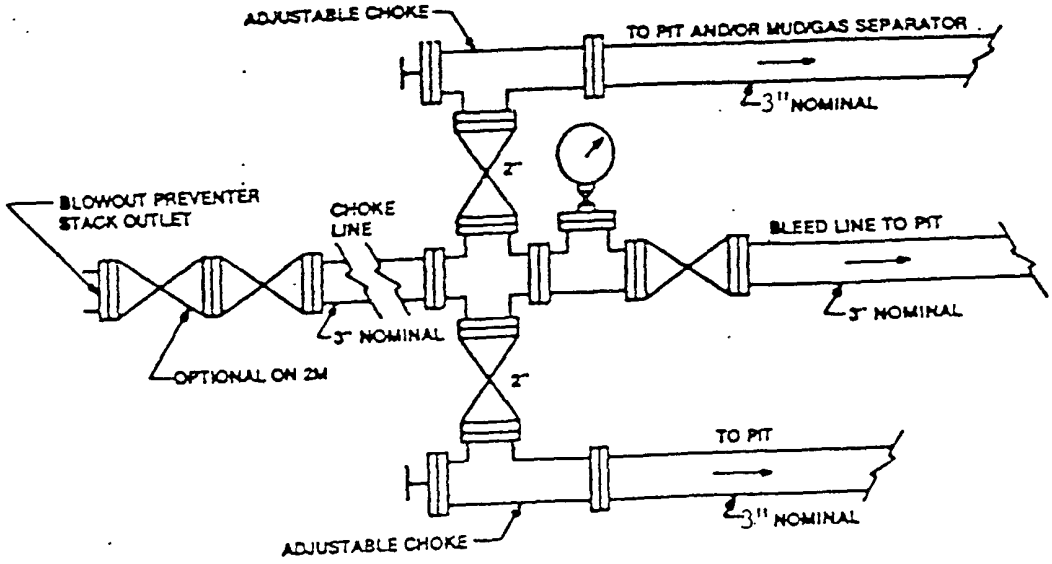


ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "I"
SKETCH OF B.O.P. THAT
MAYBE USED ON

APACHE CORPORATION
HAWK "B-1" #58
UNIT "J" SECTION 8
T21S-R37E LEA CO. NM



Typical choke manifold assembly for 3M WP system

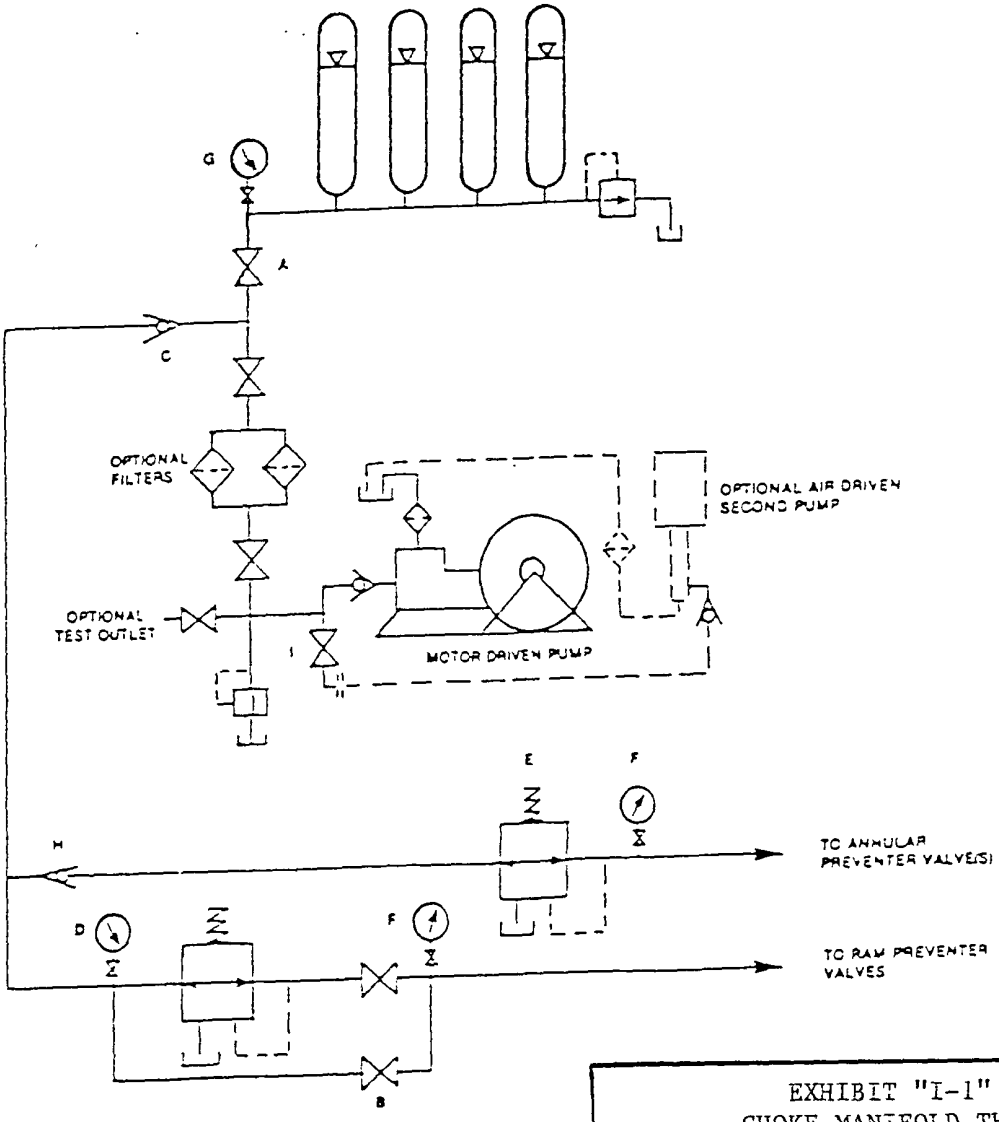


EXHIBIT "I-1"
CHOKE MANIFOLD THAT
MAYBE USED ON

APACHE CORPORATION
HAWK "B-1" #58
UNIT "J" SECTION 8
T21S-R37E LEA CO. NM

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Apache Corporation
Well Name & No. 58 – Hawk "B - 1"
Location: 2620' FSL, 1440' FEL, Sec. 8, T-21-S, R-37-E, Lea County, NM
Lease: NM-90161

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:

1. Spudding well
2. Setting and/or Cementing of all casing strings
3. BOPE tests

- Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612

B. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. It has been reported in Sections 3 and 10 measuring 200-500 ppm in gas streams and 400-130,000 in STVs.

C. 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.

II. CASING:

A. The 13-3/8 inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite at approximately 1345 feet** and cemented to the surface. **Additional cement will be required for additional casing. Fresh water mud to be used to setting depth of surface casing.**

1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
2. Wait on cement (WOC) time for a primary cement job will be a minimum of 18 hours for a water basin, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
4. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the Glorieta formation.

B. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall extend a minimum of 200' inside the surface casing.**

C. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool I joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.

B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** PSI. **As requested in APD, a 2M BOP/BOPE system can be used if available.**

C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
   1. The tests shall be done by an independent service company.
   2. The results of the test shall be reported to the appropriate BLM office.
   3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
   4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53 Sec. 17. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

Engineer on call phone (after hours): 505-706-2779

~~WWI 061307~~

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
March 12, 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 Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: APACHE CORPORATION Telephone: 918-491-4980 e-mail address:
Address: 6120 SOUTH YALE SUITE 1500 TULSA, OKLAHOMA 74136-4224
Facility or well name: HAWK "B-1" # 58 API #: 30-025-38493 U/L or Qtr/Qtr J Sec 8 T 21S R 37E
County: LEA Latitude 32.493263 Longitude 103.108777 NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 15M bbl	Volume: _____bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not. _____

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) 75'+	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	10	(20 points) (10 points) (0 points)	10
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	0	(20 points) (0 points)	0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	0	(20 points) (10 points) (0 points)	0
	Ranking Score (Total Points)	10		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: onsite ☐ offsite ☐ 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 ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

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 ☐.**
Date: 06/12/07
Printed Name/Title Joe T. Janica Agent Signature Joe T. Janica

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.

Approval:
Date: 8/27/07
Printed Name/Title CHRIS WILLIAMS/DIST. SUPV. Signature Chris Williams
OC DISTRICT SUPERVISOR/GENERAL MANAGER

JUN 2007
Received
Hobbs
OCD