

## APPLICATION FOR PERMIT TO DRILL OR REENTER

Lease Serial No.

NM 25876

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		6. If Indian, Allottee or Tribe Name N/A	
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. Unit or CA Agreement Name and No. 29747	
2. Name of Operator Chevron U.S.A. Inc. 4323		8. Lease Name and Well No. GETTY 24 FEDERAL #17	
3a. Address 15 Smith Road, Midland Texas 79705		9. API Well No. 30-015-32780	
3b. Phone No. (include area code) (915) 687-7375		10. Field and Pool, or Exploratory LIVINGSTON RIDGE	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 790' FSL, & 1650' FWL, UNIT N At proposed prod. zone SAME R-111-P Potash		11. Sec., T., R., M., or Blk. and Survey or Area SEC 24, T-22S, R-31E	
14. Distance in miles and direction from nearest town or post office* 29 MILES EAST OF CARLSBAD, NM		12. County or Parish EDDY	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 790'	16. No. of Acres in lease 640	17. Spacing Unit dedicated to this well 40	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8600'	20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3585'	22. Approximate date work will start* 07-08-03	23. Estimated duration 4 WEEKS	

## 24. Attachments

Carlsbad Controlled Water Basin

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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan  | 5. Operator certification.   |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Denise Pinkerton</i>	Name (Printed/Typed) DENISE PINKERTON	Date 2-26-03
Title REGULATORY SPECIALIST		
Approved by (Signature) <i>151 GARY L. JOHNSON</i>	Name (Printed/Typed) 151 GARY L. JOHNSON	Date APR 28 2003
Title Acting STATE DIRECTOR	Office NM STATE 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 1 YEAR

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 Reverse)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name <i>Livingston Ridge</i>
Property Code	Property Name GETTY 24 FEDERAL	Well Number 17
OGRID No. 4323	Operator Name Chevron U.S.A. INC.	Elevation 3585'

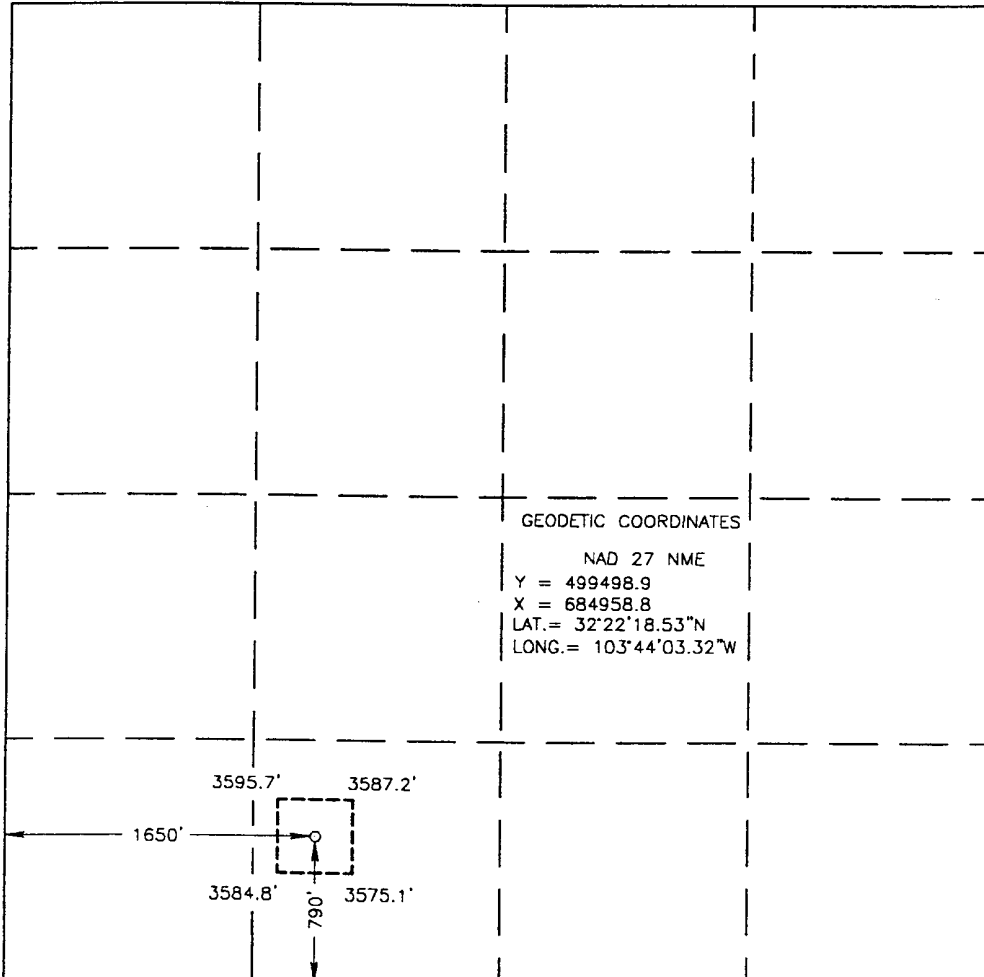
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	24	22-S	31-E		790'	SOUTH	1650'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint 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

	GEODETIC COORDINATES NAD 27 NME Y = 499498.9 X = 684958.8 LAT. = 32°22'18.53"N LONG. = 103°44'03.32"W
	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  <i>Denise Leake Pinkerton</i> Signature DENISE LEAKE PINKERTON Printed Name Regulatory Specialist Title 2-26 '03 Date
	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.  NOVEMBER 18, 2002 Date Surveyed Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i> 11/19/02 02.11.0873
	Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641



**PRELIMINARY DRILLING PROGRAM**

Lease and Well No. \_\_\_\_\_

Getty 24 Federal #17 \_\_\_\_\_

**LAND INFORMATION**

Distance to Nearest Lease Line \_\_\_\_\_

No. Acres in Lease \_\_\_\_\_

No. Acres Assigned to Well \_\_\_\_\_

Distance to Nearest Well \_\_\_\_\_

**MUD PROGRAM**

Depth	Type	Weight	Remarks
0-780'	Fresh Water	8.4	Circulate pits or reserve, visc. 32
780-4420'	Brine	10	Circulate reserves, Lime pH 9, visc. 29
4420-8600'	Brine/Starch	8.5	Starch / LCM for seepage as needed,
	Gel (if needed)		visc. 28-45, keep Chlorides below 100,000,
			WL to 12 at TD, Increase viscosity to 45 at TD

**TUBULAR PROGRAM**

String Type	Hole Size	Depth	Feet	Casing Diameter	Weight	Grade	Connection Type	ERW/ Seamless	Critical Inspectn
Surface	17-1/2"	780	780	13-3/8"	48	H-40	STC	ERW	NO
Intermed.	11"	4420	4420	8-5/8"	32	J-55	LTC	ERW	NO
Production	7-7/8"	4200	4200	5-1/2"	15.5	J-55	LTC	ERW	NO
		8600	4600	5-1/2"	17	J-55	LTC	ERW	NO

Note: Pipe to end up in hole from top to bottom as shown.

**CEMENT PROGRAM**

String Type	DV Depth	Stage Lead/Tail	Cement Bottom	Cement Top	No Sacks	Cement Type	Cement Yield	Cement Weight
Surface		All	780	0	950	"C"	1.34	14.8
Intermed.		Lead	3920	Surface	1080	35/65 Poz	1.94	12.8
		Tail	4420	3920	230	"H"	1.18	15.6
Production	6100	1 All	8600	6100	640	50/50 Poz	1.35	14.2
	3700	2 Lead	5700	3700	360	35/65 Poz	2.14	12.4
		2 Tail	6100	5700	120	50/50 Poz	1.35	14.2
		3 Lead	3400	0	360	35/65 Poz	2.14	12.4
		3 Tail	3700	3400	50	50/50 Poz	1.35	14.2

**BOP PROGRAM**

Hole Size	Exhibit	Pressure Rating
	Exhibit C, Drilling Manual	3M

Remarks: \_\_\_\_\_ Air blows possible around 600'

\_\_\_\_\_ Possible strong water flows with sour gas at +/-3300'

\_\_\_\_\_ Possible water flows at +/-6000'

\_\_\_\_\_

Prepared By: \_\_\_\_\_

B. D. Schaneman \_\_\_\_\_

Date: 11/18/2002 \_\_\_\_\_

**ChevronTexaco Permian Business Unit  
Well Proposal Data Sheet**

Well Name: GETTY 24 FEDERAL #17 Field/Area: CARLSBAD Date: 10/30/2002  
 Surf. Loc.: 1650 FWL, 990 FSL, SEC 24 T22S R31E LIVINGSTON RIDGE County/State: EDDY CO., NM  
 Shot Pt. for Surf. Loc.: \_\_\_\_\_ Authorized TD: 8600' MD  
 B.H. Target: \_\_\_\_\_ @ \_\_\_\_\_ TVD Actual Est. TD: \_\_\_\_\_ MD  
 Shot Pt. for B.H. Target: \_\_\_\_\_ Actual Est. TD: \_\_\_\_\_ TVD

**Estimated Formation Tops (based on 3,607' KB est. elevations):**

Formation	TVD	Subsea
Rustler	800'	
Lamar	4470'	
Bell Canyon	4561'	
Brushy Canyon	7040'	
Bone Spring Lm	8380'	

Formation	TVD	Subsea

Suggested Csg Depths: Intermediate casing point @ 4420'

Required Mud Parameters: Control chlorides if possible to less than 100,000

Sample, Drilling Time & ML Requirements: 2 Man Mud Logging Unit

DST's (incl any special requirements): \_\_\_\_\_

Cores (incl est. cost for analysis): 40 sidewall cores

**Anticipated Completion Intervals:**

Formation	Depths	Pressures
Cherry Canyon	6580'	
Cherry Canyon	6980'	
Brushy Canyon	7080'	
Brushy Canyon	8130-8350'	

**Other Potential Pay Zones:**

Formation	Depths	Pressures

Type of Logs (incl sidewall cores) and Est. Total Cost: \_\_\_\_\_

Run # 1 (logs & intervals): PLATFORM EXPRESS W/NGT & HIGH RESOLUTION INDUCTION LOG, FROM TD TO BASE INTER. CSG.

Run # 2 (logs & intervals): \_\_\_\_\_

Run # 3 (logs & intervals): \_\_\_\_\_

Possible Drilling Hazards (High press, lost circ, H2S, deviation, etc.): \_\_\_\_\_

Remarks (Special well, production csg size/OH completion or location requirements, etc): \_\_\_\_\_

Base Fresh Water: \_\_\_\_\_

By: Water Board Letter/Other (Specify)

Rule 37/Unorthodox Location?: \_\_\_\_\_

Date Regulatory Approval Expected?: \_\_\_\_\_

Required height of tubing spool above GL: \_\_\_\_\_

Offset Well Data Available? \_\_\_\_\_

Required Xmas tree size & pressure rating: \_\_\_\_\_

Completion Type: \_\_\_\_\_

Prep by: \_\_\_\_\_

1/15/2003

CEMENT

	Surface Lead	Surface Tail	Int 1 Lead	Int 1 Tail	Prod. 1st Stage	Prod. 2nd Stage Lead	Prod. 2nd Stage Tail	Prod. 3rd Stage Lead	Prod. 3rd Stage Tail
System	C; 2% D20,	C; 2% S1	35/65H; 6%D20,	H Neat	50/50H; 2%D20,	35/65H; 6%D20,	50/50H; 2%D20,	35/65H; 6%D20,	50/50H; 2%D20,
Getty 24 Federal #17	2% S1		5%D44, 0.25#D29		5%D44, 0.25#D29	5%D44, 0.25#D29	5%D44, 0.25#D29	5%D44, 0.25#D29	5%D44, 0.25#D29
Density, ppg	14.2000	14.8000	12.8000	15.6000	14.2000	12.4000	14.2000	12.4000	14.2000
Yield, cf/s	1.5000	1.3400	1.9400	1.1800	1.3500	2.1400	1.3500	2.1400	1.3500
Water, g/s	7.4500	6.3100	10.5000	5.2000	6.3000	11.9500	6.3000	11.9500	6.3000
Class C \$/sx	3.0960	3.0960							
Class C # of sx	1.0000	1.0000							
Class H \$/sx			2.9600	2.9600	2.9600	2.9600	2.9600	2.9600	2.9600
Class H # of sx			0.6500	1.0000	0.5000	0.6500	0.5000	0.6500	0.5000
Poz \$/sx			1.6520		1.6520	1.6520	1.6520	1.6520	1.6520
Poz # of sx			0.3500		0.5000	0.3500	0.5000	0.3500	0.5000
S1 \$/#	0.1600	0.1600							
S1 #/sx	1.8800	1.8800							
D20 \$/#	0.0680		0.0680		0.0680	0.0680	0.0680	0.0680	0.0680
D20 #/sx	1.8800		5.3300		1.7300	5.3300	1.7300	5.3300	1.7300
D44 \$/#			0.0520		0.0520	0.0520	0.0520	0.0520	0.0520
D44 #/sx			4.3500		2.6200	4.3500	2.6200	4.3500	2.6200
D29 \$/#			0.7080		0.7080	0.7080	0.7080	0.7080	0.7080
D29 #/sx			0.2500		0.2500	0.2500	0.2500	0.2500	0.2500
D79 \$/#									
D79 #/sx									
D42 \$/#									
D42 #/sx									
Cost \$/sx	3.5250	3.3970	3.2680	2.9800	2.7370	3.2680	2.7370	3.2680	2.7370
Cost \$/cft	2.3500	2.5350	1.6840	2.5080	2.0270	1.5270	2.0270	1.5270	2.0270
Feet of fill	0	780	3920	500	2500	2000	400	3400	300
Casing Size	13.3750	13.3750	8.6250	8.6250	5.5000	5.5000	5.5000	5.5000	5.5000
Hole Size	17.5000	17.5000	11.0000	11.0000	7.8750	7.8750	7.8750	7.8750	7.8750
Annular Factor	0.6946	0.6946	0.2542	0.2542	0.1732	0.1732	0.1732	0.1732	0.1732
Excess	2.0000	2.3500	2.1000	2.1000	2.0000	2.2500	2.2500	1.3000	1.3000
Sacks	0	950	1080	230	640	360	120	360	50
Cost	0	3227	3529	681	1752	1176	328	1176	137
Cement Bottom	0	780	3920	4420	8600	5700	6100	3400	3700
Cement Top	0	0	0	3920	6100	3700	5700	0	3400
Placement Time	0	32	53	7	22	20	4	20	2
Flush Time	0	19	40	45	36	24	25	14	15
Bottom Hole Temp	70	76	99	103	135	113	116	96	98
	Surface Lead	Surface Tail	Int 1 Lead	Int 1 Tail	Prod. 1st Stage	Prod. 2nd Stage Lead	Prod. 2nd Stage Tail	Prod. 3rd Stage Lead	Prod. 3rd Stage Tail

# Data Sheet - New Well Staking - Carlsbad Team

Date: 11-11-2002

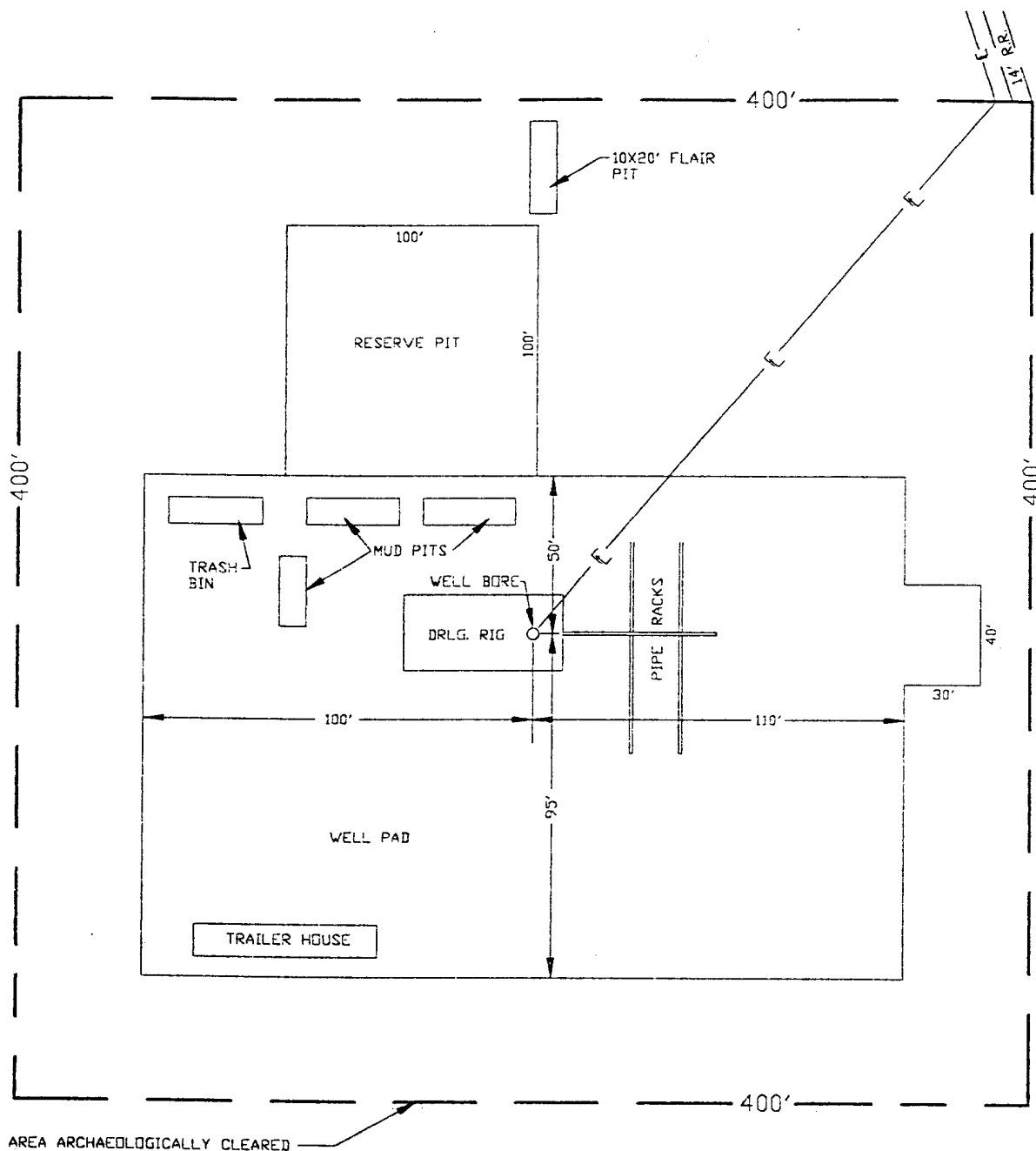
Well Name:	Getty 24 Federal #17
Chevron W.I.:	50%
Section-Township-Range:	S24-T22S-R31E
County, State	Eddy Co., NM
Proposed Surface Location:	1650'FWL, 990'FSL
Seismic Shot Points for Surface Location:	
Proposed Bottom Hole Target:	
Seismic Shot Points for Bottom Hole Location:	
Estimated KB (from topo.):	3607'
Proposed Depth:	8600'
Permit Depth:	8600'
Field:	Livingston Ridge
Objective Formation(s):	Delaware
Formation at TD:	Bone Spring
Formation at TD for Permit:	Bone Spring
Produced Fluid:	Oil, Gas, Water
Proration Unit :	40 acre

Proposed write-up for AFE cover sheet:

[Time] 11/12/2002

Prepared By:

SECTION 24, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



**ChevronTexaco Corporation**

EXHIBIT "B"  
DRILLING RIG LAYOUT  
ChevronTexaco Inc.  
GETTY FEDERAL "24" NO. 17  
790' FSL & 1650' FWL SECTION 24  
T22S, R31E, NMPM, EDDY CO., NM.

Survey Date: 11/18/02	Sheet 1 of 1 Sheets
W.O. Number: 03.11.0110	Drawn By: L.A.
Date: 1/31/03	DISK: CD#2
03110110	SCALE: NONE



## H2S DRILLING OPERATIONS PLAN

### I. HYDROGEN SULFIDE TRAINING

All contractors and subcontractors employed by Chevron U.S.A. Inc. will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. Safety precautions
3. Operations of safety equipment and life support systems

In addition, Chevron supervisory personnel will be trained or prepared in the following areas:

1. The effect of H2S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-down procedures when drilling or working a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

### II. H2S EQUIPMENT AND SYSTEMS

#### 1. Safety Equipment

The following safety equipment will be on location.

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H2S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at the briefing areas as seen in the attached diagram.

## 2. Well Control Systems

### A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accommodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit

Auxiliary equipment added as appropriate includes:

- |    |                                  |           |
|----|----------------------------------|-----------|
| a. | annular preventor                | <u>NA</u> |
| b. | rotating head                    | <u>NA</u> |
| c. | mud-gas separator                | <u>NA</u> |
| d. | flare line and means of ignition | <u>NA</u> |
| e. | remote operated choke            | <u>NA</u> |

### B. Communication

The rig contractor will be required to have a two-way communication capability. Chevron U.S.A. Inc. will have either land-line or mobile telephone capabilities.

### C. Mud Program

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing formations.

### D. No Drill Stem Tests are planned.

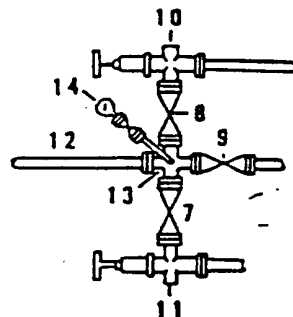
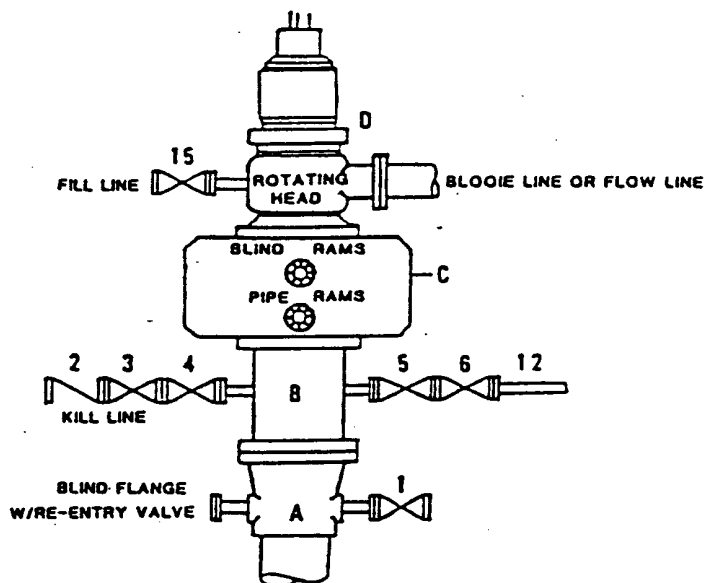
## III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached.

- 1. Rig orientation
- 2. Briefing areas
- 3. Ingress and egress
- 4. Pits and flare lines
- 5. Caution and danger signs
- 6. Wind indicators and prevailing wind direction

**DRILLING CONTROL  
CONDITION II-B 3000 WP  
FOR AIR DRILLING OR  
WHERE NITROGEN OR AIR BLOWS ARE EXPECTED**

H<sub>2</sub>S TRIM REQUIRED  
YES \_\_\_\_\_ NO X



**DRILLING CONTROL**

**MATERIAL LIST - CONDITION II - B**

- |                |   |
|----------------|---|
| A              | Texaco Wellhead   |
| B              | 3000# W.P. drilling spool with a 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line.  |
| C              | 3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram type preventers may be utilized). |
| D              | Rotating Head with fill up outlet and extended Bloop Line.  |
| 1,3,4,<br>7,8, | 2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |
| 2              | 2" minimum 3000# W.P. back pressure valve.  |
| 5,6,9          | 3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |
| 12             | 3" minimum schedule 80, Grade "B", seamless line pipe.  |
| 13             | 2" minimum x 3" minimum 3000# W.P. flanged cross.   |
| 10,11          | 2" minimum 3000# W.P. adjustable choke bodies.  |
| 14             | Cameron Mud Gauge or equivalent (location optional in choke line).  |
| 15             | 2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.   |



TEXACO, INC.  
MIDLAND DIVISION  
MIDLAND, TEXAS



SCALE	DATE	EST. NO.	DRG. NO.
DRAWN BY			
CHECKED BY			
APPROVED BY			

EXHIBIT C

#### D. CLASS III CHOKE MANIFOLD

The Class III choke manifold is suitable for Class III workovers and drilling operations. The Standard Class III choke manifold is shown in Figure 11J.8 below. Specific design features of the Class III manifold include:

1. The manifold is attached to a drilling spool or the top ram preventer side outlet.
2. The minimum internal diameter is 2" (nominal) for outlets, flanges, valves and lines.
3. Includes two steel gate valves in the choke line at the drilling spool outlet. The inside choke line valve may be remotely controlled (HCR).
4. Includes two manually adjustable chokes which are installed on both side of the manifold cross. Steel isolation gate valves are installed between both chokes and the cross, and also downstream of both chokes.
5. Includes a bleed line which runs straight through the cross and is isolated by a steel gate valve.
6. Includes a valve isolated pressure gauge suitable for drilling service which can display the casing pressure within view of the choke operator.
7. Returns through the choke manifold must be divertible through a mud-gas separator and then be routed to either the shale shaker or the reserve pit through a buffer tank or manifold arrangement.
8. If the choke manifold is remote from the wellhead, a third master valve should be installed immediately upstream of the manifold cross.

