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OCD-HOBBS

Form 316  
(August 2007)

OCT 14 2008

HOBBS ULL

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No 1004-0137  
Expires July 31, 2010

5 Lease Serial No.

NMLC ~~053070~~ 0321046 If Indian, Allottee or Tribe Name  
N/A7 If Unit or CA Agreement, Name and No  
N/A8 Lease Name and Well No  
A.H. BLINEBRY NCT-1 #51

9 API Well No.

30-025-39214  
BRUNSON DRINKARD-ABO SOUTH1a. Type of work ☒ DRILL☐ REENTER1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other☐ Single Zone ☐ Multiple Zone

2 Name of Operator CHEVRON U.S.A. INC.

3a. Address 15 SMITH ROAD, MIDLAND, TEXAS 79705

3b. Phone No. (include area code)  
432-687-7375

4 Location of Well (Report location clearly and in accordance with any State requirements \*)

At surface UL:D 760' FNL, &amp; 660' FWL Capitan Controlled Water Basin

At proposed prod zone SAME

11 Sec, T, R, M. or Blk. and Survey or Area  
SEC 29, T-22-S, R-38-E

14 Distance in miles and direction from nearest town or post office\*

12 County or Parish  
LEA13 State  
NM15 Distance from proposed\*  
location to nearest  
property or lease line, ft  
(Also to nearest drig unit line, if any)16 No. of acres in lease  
184017 Spacing Unit dedicated to this well  
4018 Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft19 Proposed Depth  
7100'20 BLM/BIA Bond No. on file  
CA 032921. Elevations (Show whether DF, KDB, RT, GL, etc )  
3392' GL

22. Approximate date work will start\*

23. Estimated duration  
12 DAYS

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 must 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  
BLM

25 Signature

Denise Pinkerton

Name (Printed/Typed)

DENISE PINKERTON

Date

09/10/2008

Title

REGULATORY SPECIALIST

Approved by (Signature)

Is/ Don Peterson

Name (Printed/Typed)

Is/ Don Peterson

Date

OCT 12 2008

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.

(Continued on page 2)

\*(Instructions on page 2)

SEE ATTACHED FOR  
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

*Statement Accepting Responsibility for Operations*

*Operator Name:* Chevron U.S.A. Inc.  
*Street or Box:* 15 Smith Road  
*City, State:* Midland, Texas  
*Zip Code:* 79705

*The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:*

*Lease No.:* NMLC ~~053070~~ 032104

*Legal Description of Land:* A.H. BLINEBRY NCT-1 #51  
Unit Letter D, Section 29, T-22-S,R-38-E  
760' FNL & 660' FWL  
Lea County, New Mexico

*Formation(s) (if applicable):* BRUNSON DRINKARD-ABO, TUBB  
OIL & GAS, BLINEBRY OIL & GAS

*Bond Coverage: (State if individually bonded or another's bond):*  
Company Bond    Nationwide Bond

*BLM Bond File No.:* CA 0329

*Authorized Signature:* 

*Title:* Regulatory Specialist

*Date:* 09-10-2008

OPERATOR - LANDOWNER AGREEMENT

Company: CHEVRON U.S.A. INC.

Proposed Well : A.H. BLINEBRY NCT-1 #51

Federal Lease No: NMLC ~~053070~~ 032104

*This is to advise that Chevron U.S.A. Inc. has an agreement with:*

D.K. BOYD OIL & GAS CO., INC.

P.O. BOX 11351

MIDLAND, TX 79702

*(Cattle Company)*

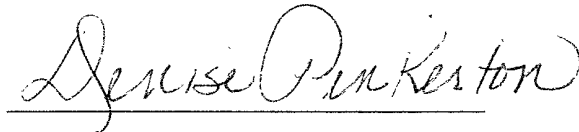
ATTN: D.K. BOYD

432-685-1022

*The surface owner, concerning entry and surface restoration after completion of drilling operations at the above described well.*

*After abandonment of the well, all pits will be filled & leveled; all equipment and trash will be removed from well site. No other requirements were made concerning restoration of the well site.*

09-10-2008



Denise Pinkerton  
Regulatory Specialist  
Chevron U.S.A. Inc.  
Midland, Texas 79705

DISTRICT I  
1825 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 <b>30-025-39214</b>	Pool Code <b>7900</b>	Pool Name <b>Brunson Quirkard Also, South</b>
Property Code <b>29899</b>	Property Name <b>A.H. BLINEBRY FEDERAL NCT-1</b>	Well Number <b>51</b>
OGRID No. <b>4323</b>	Operator Name <b>CHEVRON USA INC.</b>	Elevation <b>3392'</b>

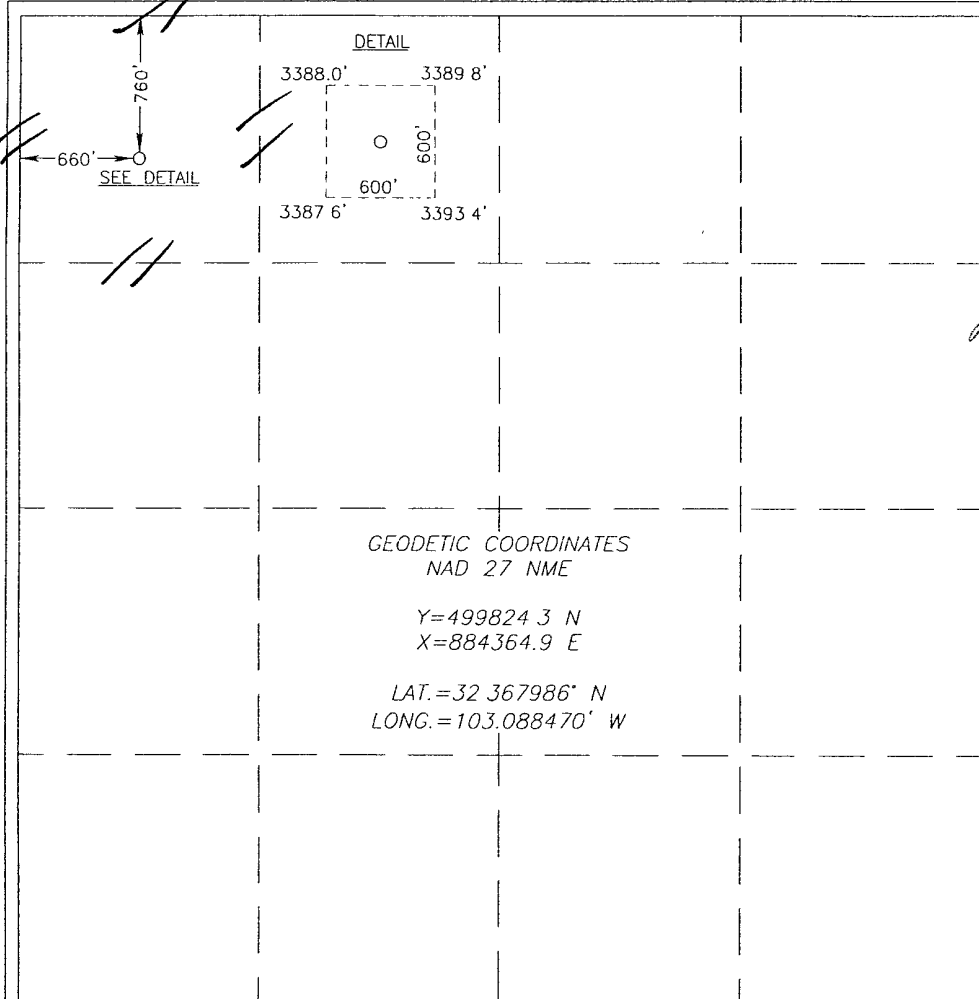
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	29	22-S	38-E		760	NORTH	660	WEST	LEA

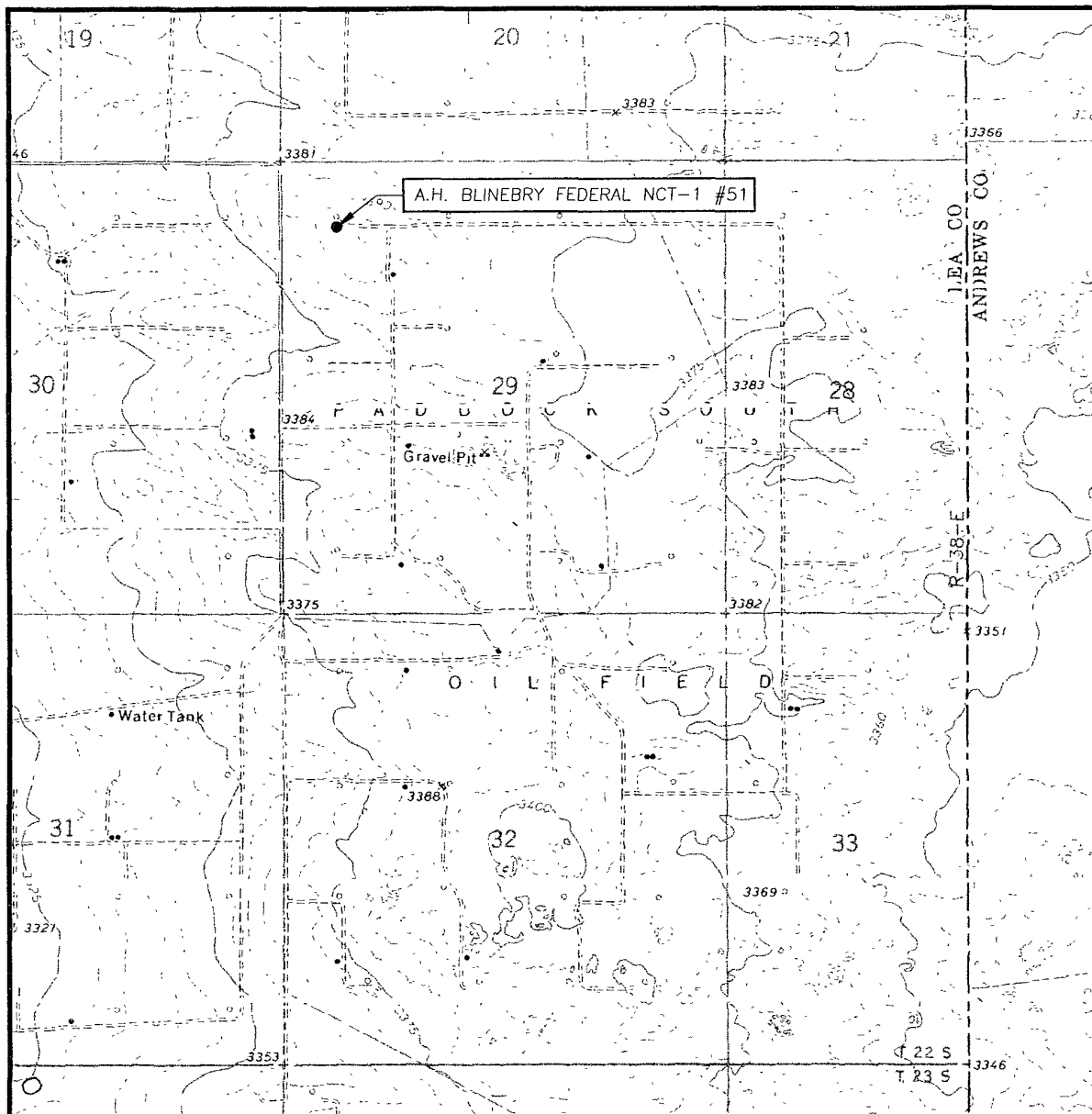
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>40</b>	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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>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.</p> <p><i>Denise Pinkerton</i> 9-10-08 Signature Date <b>Denise Pinkerton</b> Printed Name</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p><b>Geodetic Coordinates</b> NAD 27 NME Y=499824.3 N X=884364.9 E LAT.=32 367986" N LONG.=103.088470" W</p> <p><b>Surveyor Certification</b> Date Surveyed: <b>JULY 25, 2008</b> Signature &amp; Seal of Professional Surveyor: <i>Ronald J. Eidson</i> 12641 Certificate No. <b>GARY EIDSON 12641</b> <b>RONALD J. EIDSON 3239</b></p>
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# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
EUNICE SE, N.M. - 5'

SEC. 29 TWP. 22-S RGE. 38-E

SURVEY \_\_\_\_\_ N.M.P.M. \_\_\_\_\_

COUNTY LEA STATE NEW MEXICO

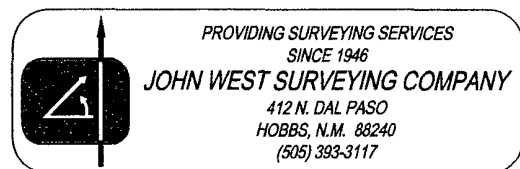
DESCRIPTION 760' FNL & 660' FWL

ELEVATION 3392'

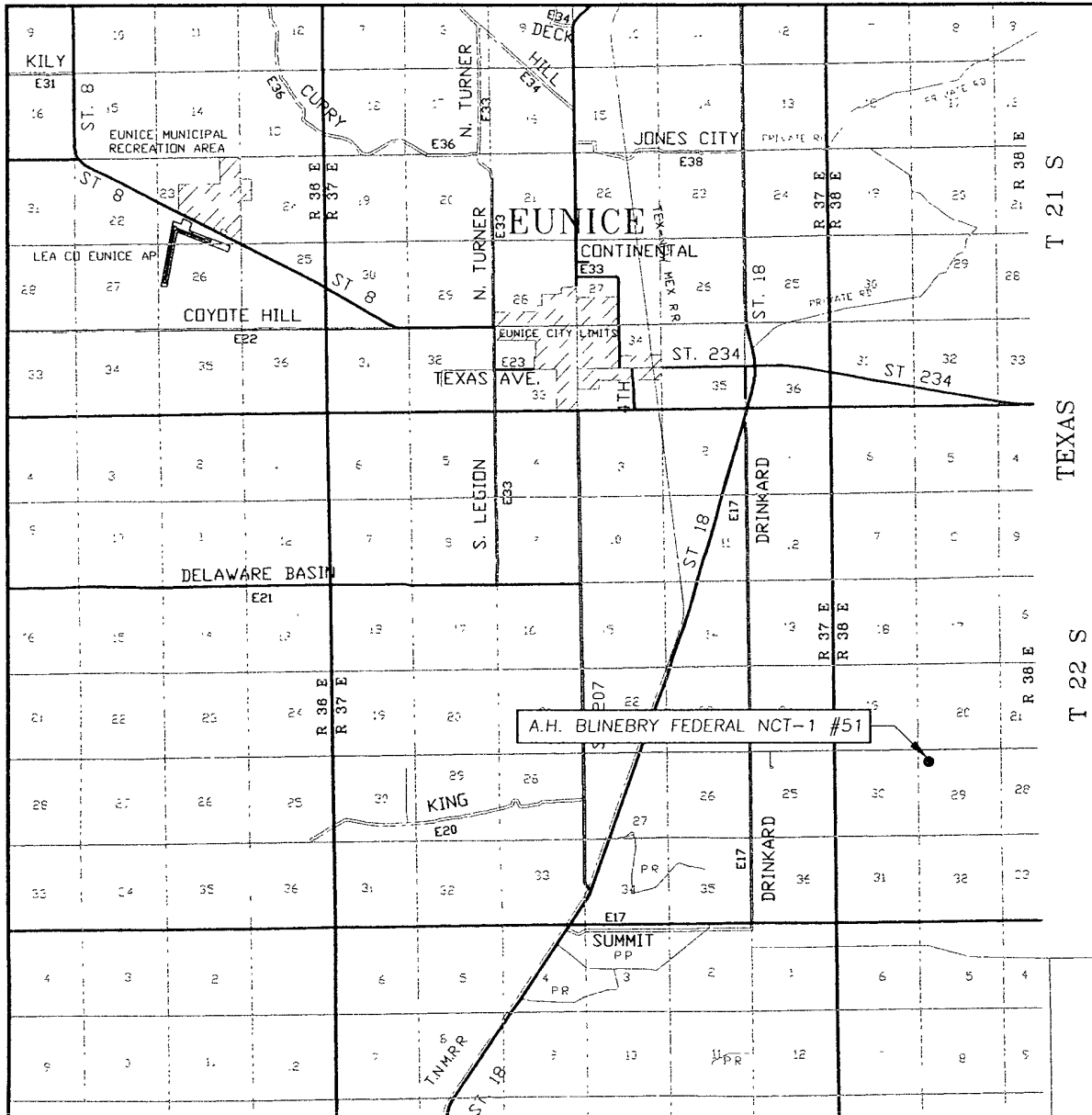
OPERATOR CHEVRON USA INC.

LEASE A.H. BLINEBRY FEDERAL NCT-1

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



# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 29 TWP 22-S RGE. 38-E

SURVEY N.M.P.M.


COUNTY LEA STATE NEW MEXICO

DESCRIPTION 760' FNL & 660' FWL

ELEVATION 3392'

OPERATOR CHEVRON USA INC.

LEASE A H BLINEBRY FEDERAL NCT-1

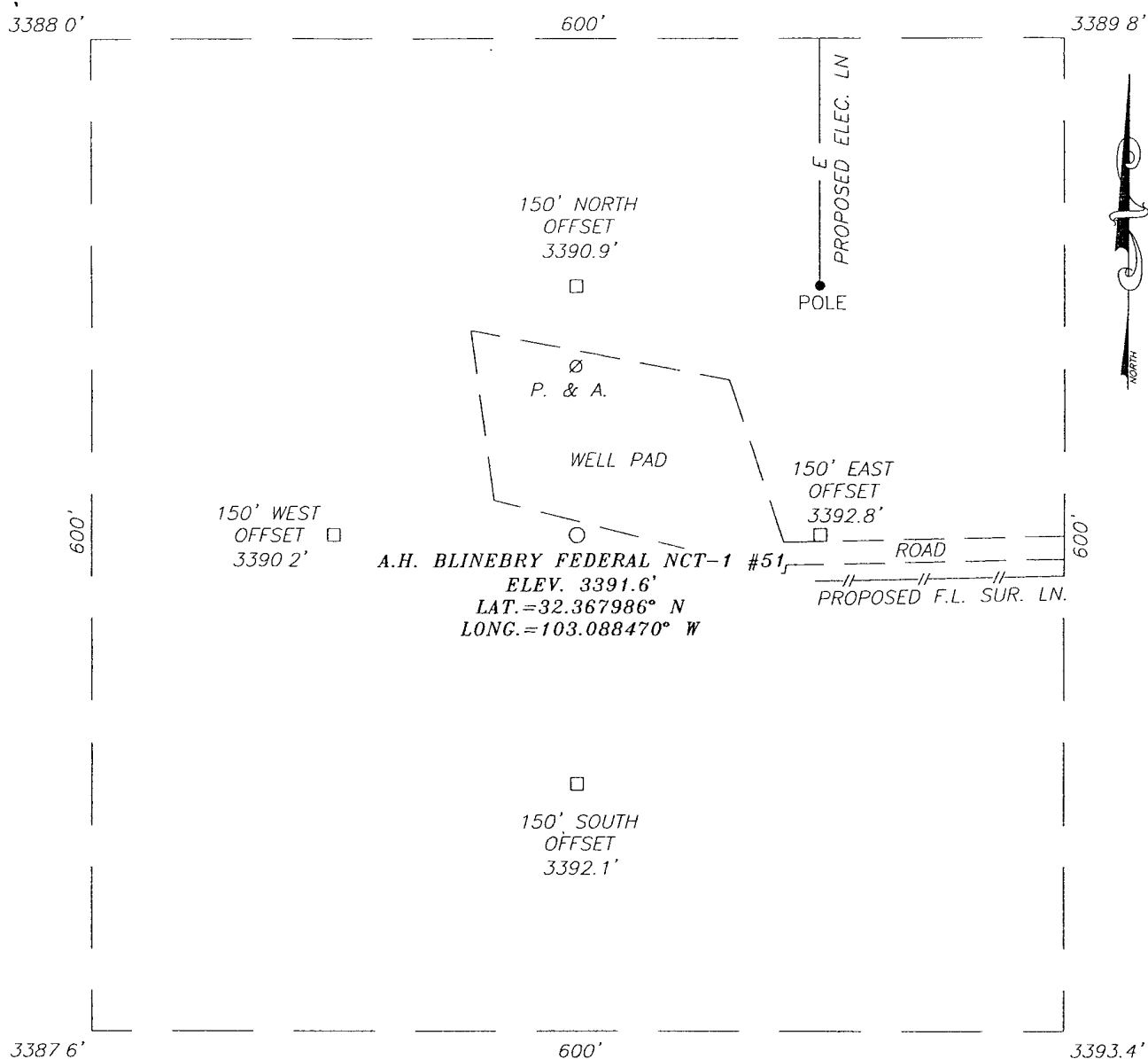


PROVIDING SURVEYING SERVICES  
SINCE 1946

**JOHN WEST SURVEYING COMPANY**

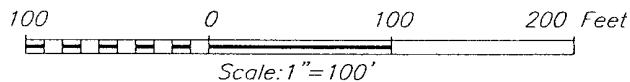
412 N DAL PASO  
HOBBS, N.M. 88240  
(505) 393-3117

SECTION 29, TOWNSHIP 22 SOUTH, RANGE 38 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD #E17 (SUMMIT RD) AND CO. RD. #E17 (DRINKARD RD.), GO NORTH ON DRINKARD RD. APPROX 2.0 MILES. TURN RIGHT AND GO EAST APPROX. 2.0 MILES. TURN RIGHT AND GO SOUTH APPROX. 0.6 MILES. TURN LEFT AND GO EAST APPROX. 0.25 MILES. TURN LEFT AND GO NORTH APPROX. 0.4 MILES. TURN LEFT ON RECLAIMED ROAD AND GO WEST APPROX. 580 FEET TO THIS LOCATION.



CHEVRON USA INC.

A.H. BLINEBRY FEDERAL NCT-1 #51 WELL  
LOCATED 760 FEET FROM THE NORTH LINE  
AND 660 FEET FROM THE WEST LINE OF SECTION 29,  
TOWNSHIP 22 SOUTH, RANGE 38 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO



PROVIDING SURVEYING SERVICES  
SINCE 1946

JOHN WEST SURVEYING COMPANY

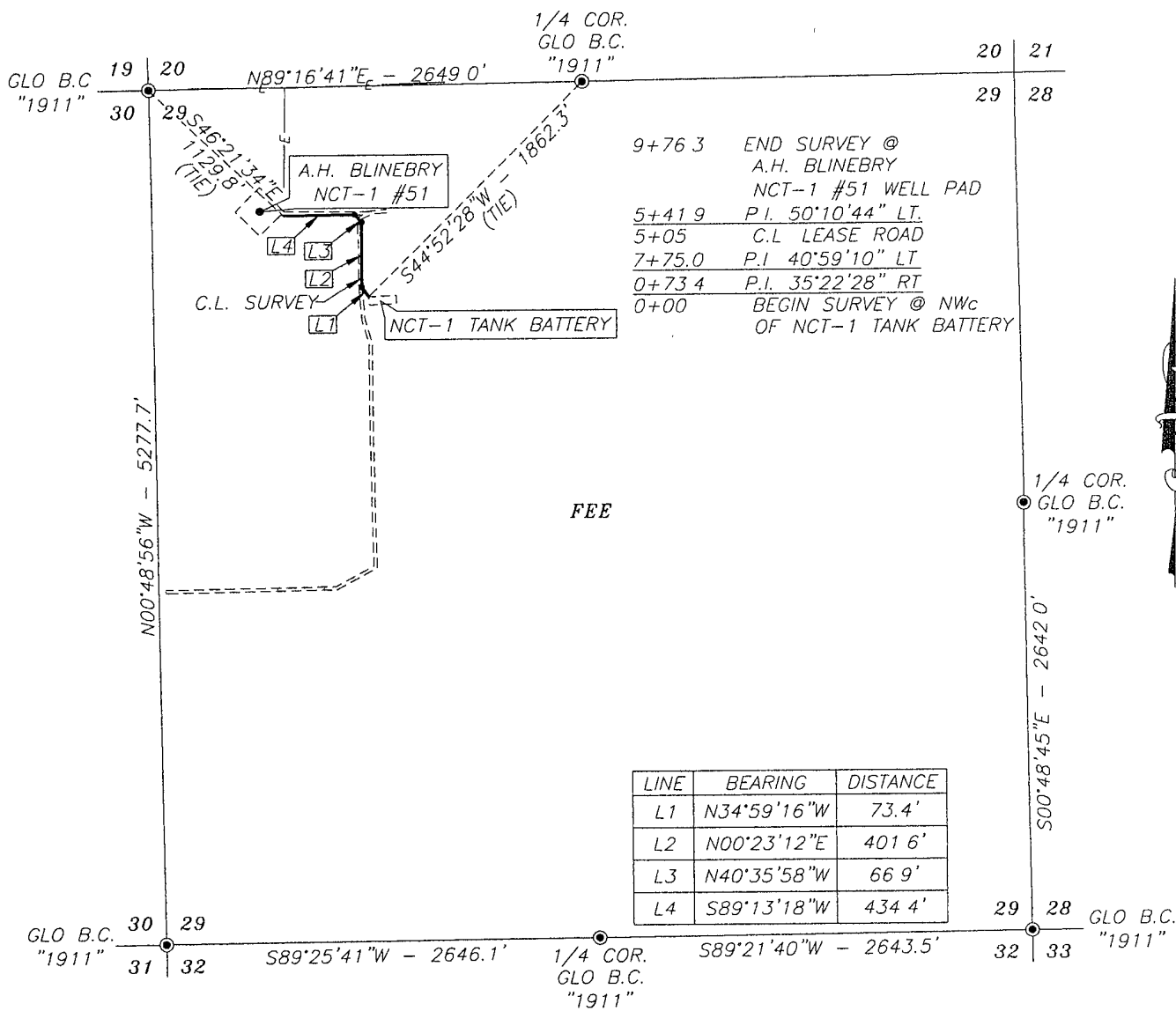
412 N. DAL PASO  
HOBBS, N.M. 88240  
(505) 393-3117

Survey Date. 7/25/08		Sheet 1 of 1 Sheets	
W.O. Number: 08 11 1179		Dr By: AR	Rev 1 N/A
Date. 8/01/08	Disk:	08111179	Scale. 1"=100'





SECTION 29, TOWNSHIP 22 SOUTH, RANGE 38 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO



DESCRIPTION

CENTERLINE SURVEY OF A PIPELINE EASEMENT CROSSING SECTION 29, TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM, LEA COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

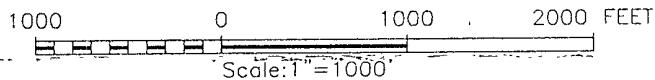
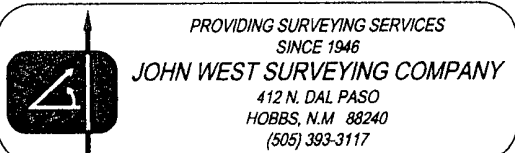
BEGINNING AT A POINT IN THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 29 WHICH LIES S44°52'28"W 1862.3 FEET FROM THE NORTH QUARTER CORNER OF SAID SECTION; THEN N34°59'16"W 73.4 FEET; THEN N00°23'12"E 401.6 FEET; THEN N40°35'58"W 66.9 FEET; THEN S89°13'18"W 434.4 FEET TO A POINT IN SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 29 WHICH LIES S46°21'34"E 1129.8 FEET FROM THE NORTHWEST CORNER OF SAID SECTION.

TOTAL LENGTH EQUALS 976.3 FEET OR 59 17 RODS

NOTE. BEARINGS SHOWN HEREON ARE  
MERCATOR GRID AND CONFORM TO THE  
NEW MEXICO COORDINATE SYSTEM  
"NEW MEXICO EAST ZONE" NORTH  
AMERICAN DATUM 1983. DISTANCES  
ARE SURFACE VALUES.

I HEREBY CERTIFY THAT I HAVE DIRECTED AND AM  
RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY IS  
TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE  
AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET  
THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

GARY G. EIDSON, N.M.P.S. No. 12641  
RONALD J. EIDSON, N.M.P.S. No. 3239



CHEVRON USA INC.

CENTERLINE SURVEY OF A  
PIPELINE EASEMENT CROSSING  
SECTION 29, TOWNSHIP 22 SOUTH,  
RANGE 38 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

Survey Date: 7/25/08	Sheet 1 of 1 Sheets
W.O. Number 08 11.1179	Drawn By: AR
Date: 8/01/08	08111179 REV 08/18/08

Exhibit A

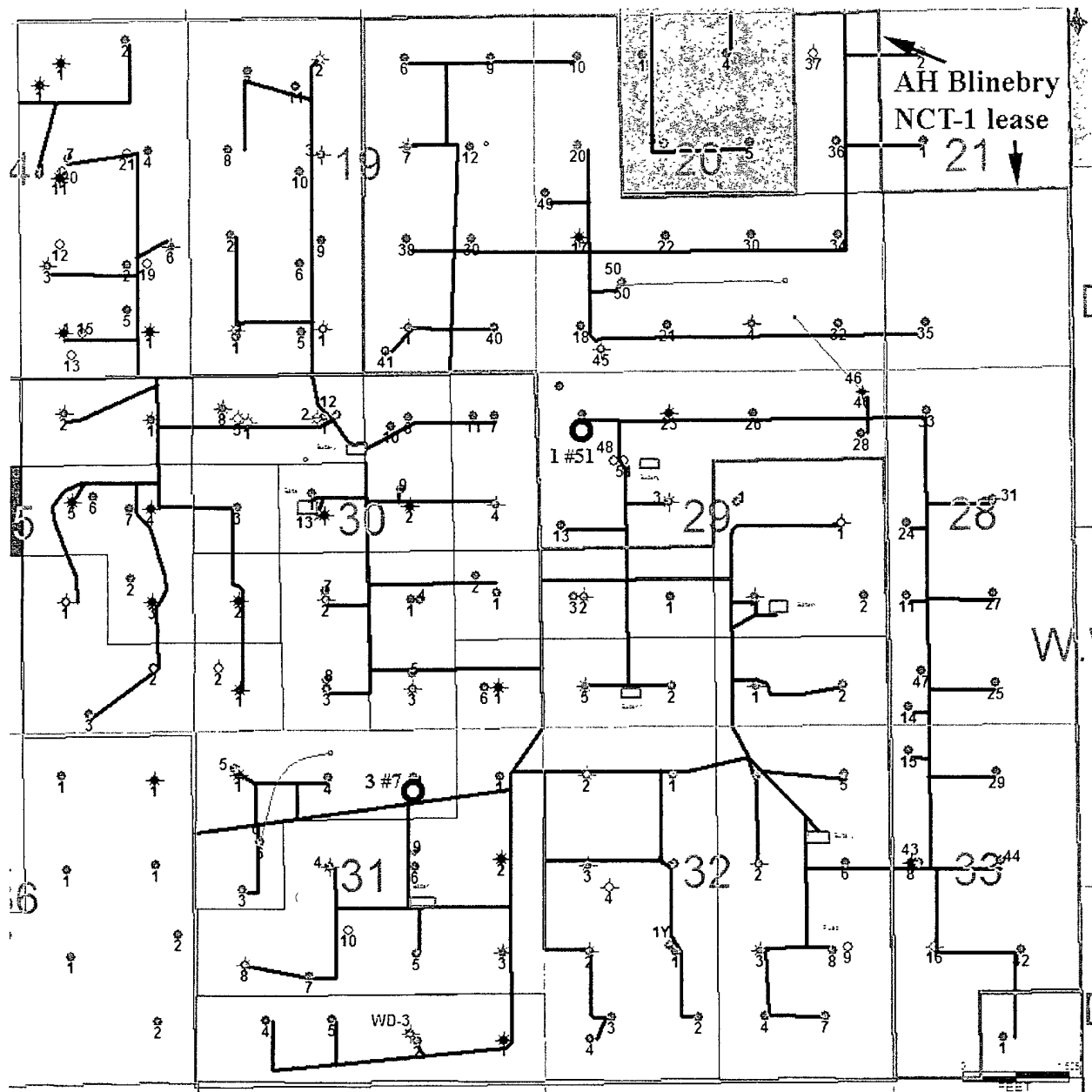
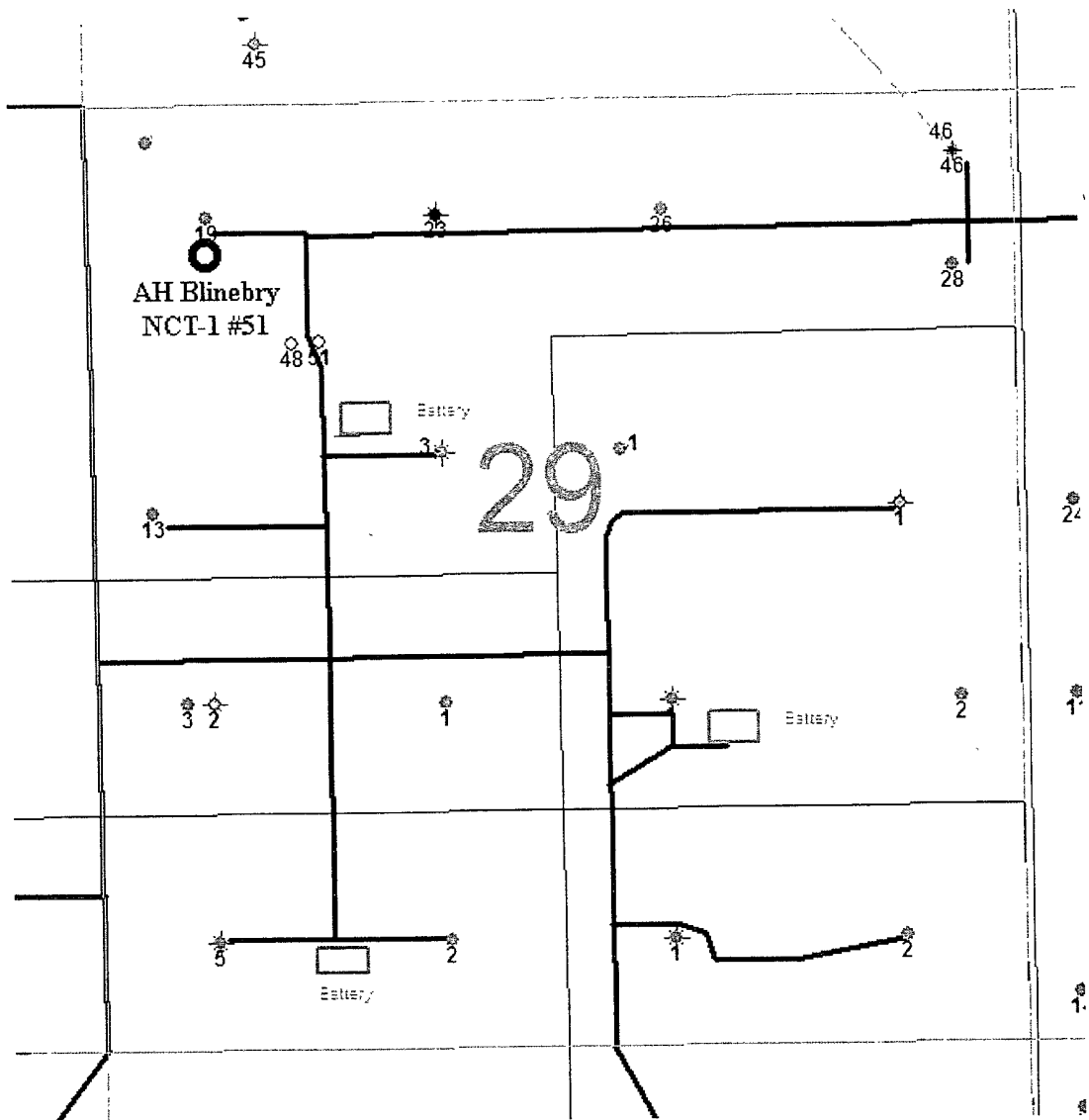


Exhibit B (cont.)



## Exhibit C

DISTRICT I  
1025 N. FRENCH DR., HOBBBS, NM 88243

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 86210

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	
Property Code		Property Name			Well Number
		A.H. BLINEBRY FEDERAL NCT-1			51
OGRID No.		Operator Name			Elevation
		CHEVRON USA INC.			3392'

## 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	29	22-S	38-E		760	NORTH	660	WEST	IEA

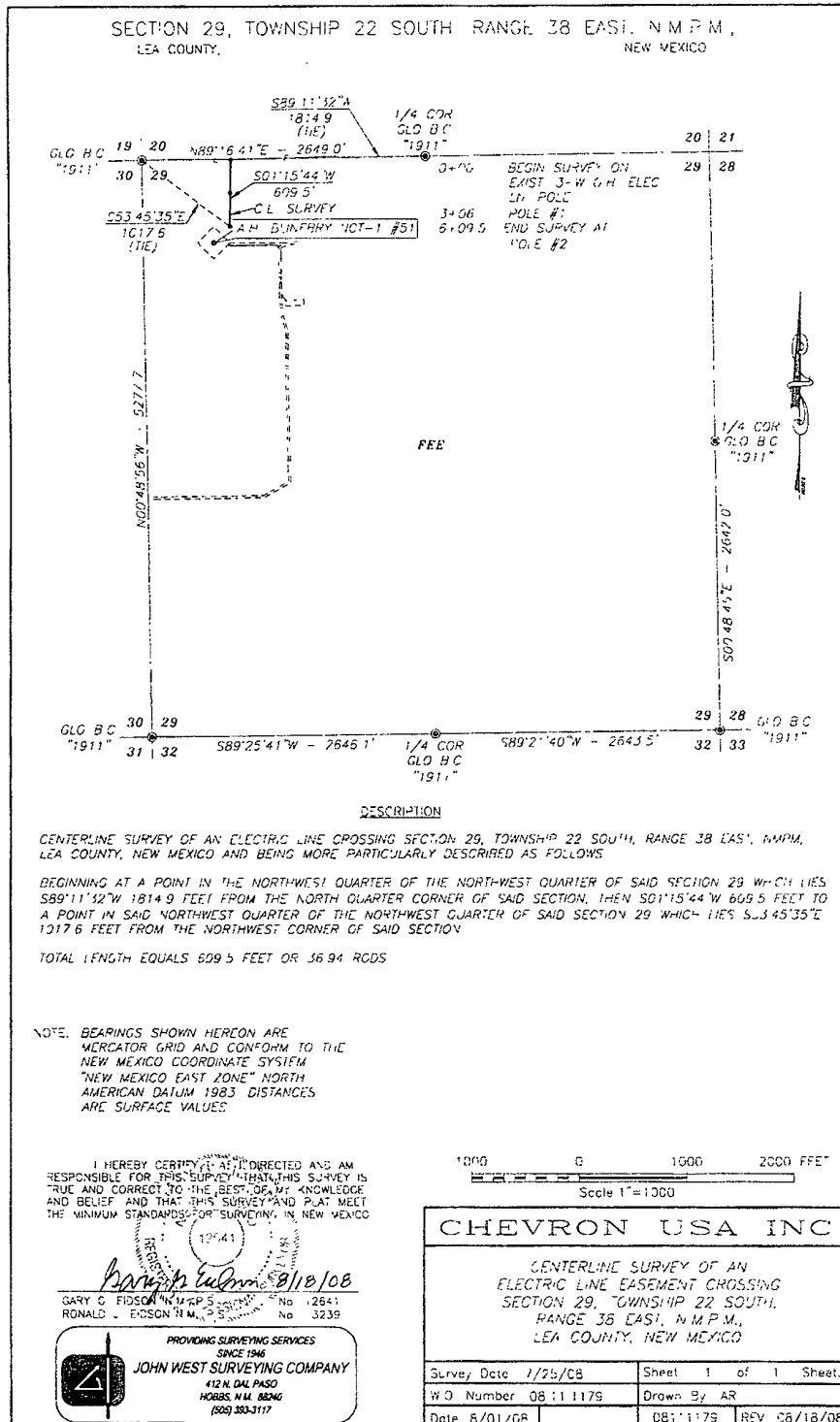
## Bottom Hole Location If Different From Surface

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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>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.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>Date Surveyed: JUL 25, 2005</p> <p>Signature and Seal of Professional Surveyor: </p> <p>Certificate No. GARY EIDSON 12641 RONALD J EIDSON 3239</p>
	<p><b>CECDETC COORDINATES</b> NAD 27 NMI"</p> <p>Y= 499824.5 N X= 884364.9 E</p> <p>LA1 = 32 367986" N LONG. = 103 088470" W</p>

Exhibit C (cont.)



**DRILLING PROGRAM**  
**A.H. Blinebry NCT-1 #51**

**1. Geologic Name of Surface Formation**

- a. Quaternary Aeolian Deposits

**2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:**

a. Rustler	1293'	Below all Fresh Water
b. Yates	2624'	
c. Glorieta	5175'	Oil/Gas
d. Blinebry	5599'	Oil/Gas
e. Tubb	6072'	Oil/Gas
f. Drinkard	6348'	Oil/Gas
g. Abo	6633'	Oil/Gas
h. Total Depth	7100'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 8-5/8" casing at +/- 1325' and circulating cement back to surface. The productive intervals will be isolated by setting 5-1/2" casing to total depth and circulating cement to the surface.

**3. Casing Program:**

<u>Hole Size</u>	<u>Depth</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>New/Used</u>
11"	0' - 1325'	8-5/8"	24#	ST&C	J-55	New
7-7/8"	0' - 7100'	5-1/2"	15.5#	LT&C	K-55	New

Surface

	Burst	Collapse	Tension
Req'd S.F.	1.2	0.85	1.8
Calc'd S.F.	4.4	2.3	1.9
Load	MAASP, shoe w/ est. frac. at 11.5ppg, less AGG.	Saltwater gradient = 8.8 ppg	Buoyed wt w/ 100,000 lbs over-pull.
Backup	Freshwater gradient = 8.3 ppg	Full Evacuation = 0 psi	n/a

#### Production

	Burst	Collapse	Tension
Req'd S.F.	1.1	0.85	1.8
Calc'd S.F.	1.2	1.2	1.8
Load	Maximum surf. frac. pressure = 4000psi combined w/ treatment fluid HP = 8.3 ppg	Saltwater gradient = 8.8 ppg	Buoyed wt w/ 40,000 lbs over-pull.
Backup	PP = 8.3 ppg	Full Evacuation = 0 psi	n/a

#### Notes:

1. S.F. = Safety Factor
2. MASP = Maximum Anticipated Surface Pressure
3. AGG = Annular Gas Gradient
4. HP = Hydrostatic Pressure
5. PP = Pore Pressure

#### 4. Cement Program:

##### a. 8-5/8" Surface

Cement with a single stage (through an insert float and shoe) consisting of the following single slurry: 525 sx HalCem-C+2%CaCl<sub>2</sub>+0.125 lb/sx Poly-E-Flake (LCM additive) 14.8ppg, 1.33 cu. ft / sx yield, TOC at 0' (surface). Calculations based on 100% open-hole excess over theoretical hole volume, with calculated top at 0'.

##### b. 5 1/2" Production

Cement with a single stage (through a float shoe and float collar) consisting of the following single slurry: 1425 sxs VersaCem-PBSH2 + 0.5%LAP-1(LowFluid Loss Control) + 0.5%CFR3(Dispersant) + 1pps Salt + 0.25pps D-Air(Defoamer), 0.2% HR-7 (Retarder) 13.2ppg, 1.61 cu. ft / sx yield. TOC at 0' (surface). Calculations based on 100% open-hole excess over theoretical hole volume. Note: If excessive losses are encountered while drilling, a two stage cement job utilizing a DV collar or a DV collar and External casing packer may be utilized.

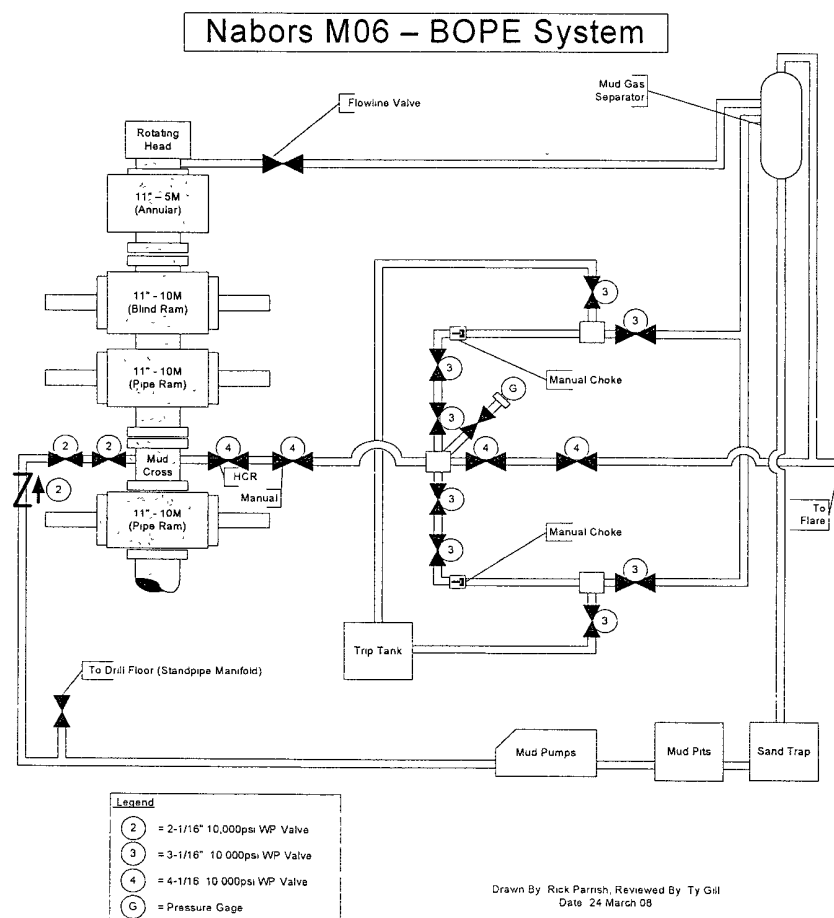
The cement volumes pumped could be revised pending the following input.

1. On the surface hole, a visible flag will be pumped as a part of the pre-flush, when dye reaches surface rig crews will immediately pump displacement, to avoid mixing and disposing of excess cement.
2. If a caliper log is obtained during open-hole logs. Cement pumped will be a minimum of 35% excess over open-hole log.

## 5. Pressure Control Equipment:

Other BOPE information:

- BOPE will be hydraulically operated.
- A 10M BOP will be installed on the 8-5/8" casing, but will be tested to as a 3M system.
- Blind rams will be functioned each time the drill string is out of the hole.





## 6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' – 1325'	8.3	32-40	No Control	Fresh Water
1325' – 7100'	10.0	29	No Control	Saturated Brine

The necessary mud products for weight addition and fluid loss control will be on location at all times. Mud weights may be raised to safely accommodate well control events.

### Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 8-5/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location from spud shoe until total depth is reached.

## 7. Logging, Coring, and Testing Program:

- a. The open hole electrical logging program will be:
  - i. Total Depth to 5,000': Gamma Ray, Resistivity, Neutron Density and Caliper.
  - ii. Spectral Gamma Ray and Borehole Sonic.
- b. No coring program is planned.
- c. No Drill Stem Tests are planned

## 8. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. Monitor pH for H<sub>2</sub>S and if pH drops rapidly, add lime, Barocor 95 or H800 (HOWCO additives) as per mud engineer. Ensure corrosion inhibitors, amines and H<sub>2</sub>S scavengers are properly maintained in mud system, due to the potential for H<sub>2</sub>S. If H<sub>2</sub>S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4200 psi and Estimated BHT 120°F.

**9. Anticipated Starting Date and Duration of Operations:**

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval. Move in operations and drilling is expected to take approximately 12 days. Production casing will be run utilizing the Nabors M-06. After the wellhead is secured the Nabors M-06 will be moved to the next drilling location, then the well will be stimulated and completed by a separate rig. Production lines will be laid for the purpose of transporting produced fluids to existing surface facilities.

Nabors Rig M06

Blowout Prevention Equipment

Surface Casing Pressure Test

BOPE Rating: 10000

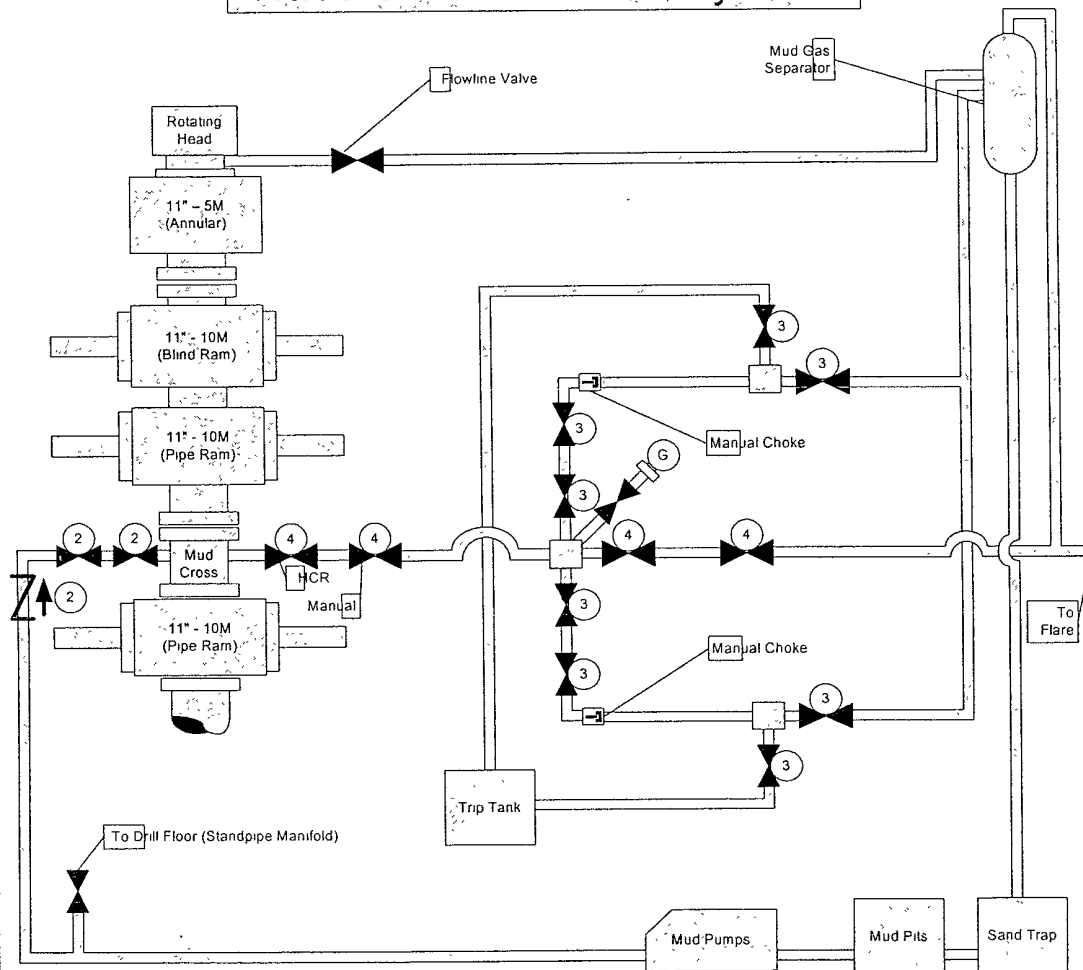
ram pressure test: 3000 psi

30 percent (of working pressure)

annular pressure test: 1500

Utilize: C22 - Test Plug

## Nabors M06 – BOPE System



Legend	
(2)	= 2-1/16" 10,000psi WP Valve
(3)	= 3-1/16" 10,000psi WP Valve
(4)	= 4-1/16" 10,000psi WP Valve
(G)	= Pressure Gage

Drawn By Rick Parnish, Reviewed By Ty Gill  
Date 24 March 08

- Notes:  
1 Flare pit should always be in North or Eastern corner of location, to take advantage of prevailing winds in the event of an H2S occurrence  
2 20' wide roadway should be included to allow access to skip loader tracks from either end

## **Exhibit B (cont.)**

### Nabors M06: Operating and Maintenance Plan

1. 250 bbl, ½ frac. tank, cutting tank with dimensions of 32' x 10.5' x 6'tall will be installed on top of 20 mil plastic barrier.
2. Cuttings will be discharged from shaker into cuttings tank.
3. Cutting tank will be continuously monitored by designated roughneck or derrick-man so that cuttings tank will not be overfilled.
4. Rig crew will visually inspect fluid integrity of cuttings tank on a daily basis.
5. Documentation of visual inspection of cutting tank will be captured on IADC Drilling Report.

### Nabors M06: Closure Plan

1. Drilled cuttings will be dipped out of tank with backhoe bucket and placed in suitable transport container (dump truck tank or cuttings bin).
2. Drill cuttings will be disposed of at a suitable off-location waste disposal facility.

## HYDROGEN SULFIDE CONTINGENCY PLAN

### SCOPE

THIS CONTINGENCY PLAN ESTABLISHES GUIDELINES FOR THE PUBLIC. ALL COMPANY EMPLOYEES WHO'S WORK ACTIVITIES MAY INVOLVE EXPOSURE TO HYDROGEN SULFIDE (H<sub>2</sub>S) GAS.

### OBJECTIVE

1. PREVENT ANY AND ALL ACCIDENTS, AND PREVENT THE UNCONTROLLED RELEASE OF HYDROGEN SULFIDE INTO THE ATMOSPHERE.
2. PROVIDE PROPER EVACUATION PROCEDURES TO COPE WITH EMERGENCIES.
3. PROVIDE IMMEDIATE AND ADEQUATE MEDICAL ATTENTION SHOULD AN INJURY OCCUR.

## H2S CONTINGENCY PLAN

DISCUSSION

## GEOLOGICAL PROGNOSIS

IMPLEMENTATION:	THIS PLAN WITH ALL DETAILS IS TO BE FULLY IMPLEMENTED BEFORE DRILLING TO <u>PRODUCTION CASING POINT</u> .
EMERGENCY RESPONSE PROCEDURE:	THIS SECTION OUTLINES THE CONDITIONS AND DENOTES STEPS TO BE TAKEN IN THE EVENT OF AN EMERGENCY.
EMERGENCY EQUIPMENT PROCEDURE:	THIS SECTION OUTLINES THE SAFETY AND EMERGENCY EQUIPMENT THAT WILL BE REQUIRED FOR THE DRILLING OF THIS WELL.
TRAINING PROVISIONS:	THIS SECTION OUTLINES THE TRAINING PROVISIONS THAT MUST BE ADHERED TO PRIOR TO DRILLING <u>TO PRODUCTION CASING POINT</u> .
DRILLING EMERGENCY CALL LISTS:	INCLUDED ARE THE TELEPHONE NUMBERS OF ALL PERSONS TO BE CONTACTED SHOULD AN EMERGENCY EXIST.
BRIEFING:	THIS SECTION DEALS WITH THE BRIEFING OF ALL PEOPLE INVOLVED IN THE DRILLING OPERATION.
PUBLIC SAFETY:	PUBLIC SAFETY PERSONNEL WILL BE MADE AWARE OF THE DRILLING OF THIS WELL
CHECK LISTS:	STATUS CHECK LISTS AND PROCEDURAL CHECK LISTS HAVE BEEN INCLUDED TO INSURE ADHERENCE TO THE PLAN
GENERAL INFORMATION:	A GENERAL INFORMATION SECTION HAS BEEN INCLUDED TO SUPPLY SUPPORT INFORMATION

## H2S CONTINGENCY PLAN

### EMERGENCY PROCEDURES

- A. IN THE EVENT OF ANY EVIDENCE OF H2S LEVEL ABOVE 10 PPM, TAKE THE FOLLOWING STEPS:
  1. SECURE BREATHING EQUIPMENT.
  2. ORDER NON-ESSENTIAL PERSONNEL OUT OF DANGER ZONE.
  3. TAKE STEPS TO DETERMINE IF THE H2S LEVEL CAN BE CORRECTED OR SUPPRESSED AND, IF SO, PROCEED IN NORMAL OPERATION.
- B. IF UNCONTROLLABLE CONDITIONS OCCUR:
  1. TAKE STEPS TO PROTECT AND/OR REMOVE ANY PUBLIC IN THE DOWN-WIND AREA FROM THE RIG -- PARTIAL EVACUATION AND ISOLATION. NOTIFY NECESSARY PUBLIC SAFETY PERSONNEL AND THE BUREAU OF LAND MANAGEMENT OF THE SITUATION.
  2. REMOVE ALL PERSONNEL TO SAFE BREATHING AREA.
  3. NOTIFY PUBLIC SAFETY PERSONNEL TO SAFE BREATHING AREA.
  4. PROCEED WITH BEST PLAN (AT THE TIME) TO REGAIN CONTROL OF THE WELL. MAINTAIN TIGHT SECURITY AND SAFETY PROCEDURES.
- C. RESPONSIBILITY:
  1. DESIGNATED PERSONNEL
  2. SHALL BE RESPONSIBLE FOR THE TOTAL IMPLEMENTATION OF THIS PLAN.
  3. SHALL BE IN COMPLETE COMMAND OF THE WELL DURING THE EMERGENCY.
  4. ALL PERSONNEL MUST FOLLOW



## EMERGENCY PROCEDURES

\*(Procedures are the same for both Drilling and Tripping)

- |                   |   |
|-------------------|---|
| ALL PERSONNEL:    | <ol style="list-style-type: none"><li>1. ON ALARM, DON ESCAPE UNIT AND REPORT IN UP WIND BRIEFING AREA.</li><li>2. CHECK STATUS OF PERSONNEL (BUDDY SYSTEM).</li><li>3. SECURE BREATHING EQUIPMENT.</li><li>4. AWAIT ORDERS FROM SUPERVISOR.</li></ol>  |
| DRILLING FOREMAN: | <ol style="list-style-type: none"><li>1. REPORT TO UP WIND BRIEFING AREA.</li><li>2. DON BREATHING EQUIPMENT AND RETURN TO POINT OF RELEASE WITH TOOL PUSHER OR DRILLER (BUDDY SYSTEM).</li><li>3. DETERMINE H<sub>2</sub>S CONCENTRATIONS.</li><li>4. ASSESS SITUATION AND TAKE CONTROL MEASURES.</li></ol>  |
| TOOL PUSHER:      | <ol style="list-style-type: none"><li>1. REPORT TO UP WIND BRIEFING AREA.</li><li>2. DON BREATHING EQUIPMENT AND RETURN TO POINT OF RELEASE WITH DRILLING FOREMAN OR DRILLER (BUDDY SYSTEM).</li><li>3. DETERMINE H<sub>2</sub>S CONCENTRATION.</li><li>4. ASSESS SITUATION AND TAKE CONTROL MEASURES.</li></ol>  |
| DRILLER:          | <ol style="list-style-type: none"><li>1. DON ESCAPE UNIT.</li><li>2. CHECK MONITOR FOR POINT OF RELEASE.</li><li>3. REPORT TO BRIEFING AREA.</li><li>4. CHECK STATUS OF PERSONNEL (IN AN ATTEMPT TO RESCUE, USE THE BUDDY SYSTEM).</li><li>5. ASSIGNS LEAST ESSENTIAL PERSON TO NOTIFY DRILLING FOREMAN AND TOOL PUSHER BY QUICKEST MEANS IN CASE OF THEIR ABSENCE</li><li>6. ASSUMES THE RESPONSIBILITIES OF THE DRILLING FOREMAN AND TOOL PUSHER UNTIL THEY ARRIVE SHOULD THEY BE ABSENT.</li></ol> |

### EMERGENCY PROCEDURES

DERRICK MAN  
FLOOR MAN #1  
FLOOR MAN #2

1. WILL REMAIN IN BRIEFING AREA UNTIL INSTRUCTED BY SUPERVISOR.

MUD ENGINEER:

1. REPORT TO BRIEFING AREA.
2. WHEN INSTRUCTED, BEGIN CHECK OF MUD FOR PH AND H<sub>2</sub>S LEVEL. (GARETT GAS TRAIN.)

SAFETY PERSONNEL:

1. MASK UP AND CHECK STATUS OF ALL PERSONNEL AND SECURE OPERATIONS AS INSTRUCTED BY DRILLING FOREMAN AND REPORT TO BRIEFING AREA.

### TAKING A KICK

WHEN TAKING A KICK DURING AN H<sub>2</sub>S EMERGENCY, ALL PERSONNEL WILL FOLLOW STANDARD BOP PROCEDURES AFTER REPORTING TO BRIEFING AREA AND MASKING UP.

### OPEN-HOLE LOGGING

ALL UNNECESSARY PERSONNEL OFF FLOOR. DRILLING FOREMAN AND SAFETY PERSONNEL SHOULD MONITOR CONDITION, ADVISE STATUS AND DETERMINE NEED FOR USE OF AID EQUIPMENT.

### RUNNING CASING OR PLUGGING

FOLLOWING THE SAME "TRIPPING" PROCEDURE AS ABOVE. DRILLING FOREMAN AND SAFETY PERSONNEL SHOULD DETERMINE IF ALL PERSONNEL HAVE ACCESS TO PROTECTIVE EQUIPMENT.

## H2S CONTINGENCY PLAN

### IGNITION PROCEDURES

THE DECISION TO IGNITE THE WELL IS THE RESPONSIBILITY OF COMPANY FOREMAN. IN THE EVENT HE IS INCAPACITATED, IT BECOMES THE RESPONSIBILITY OF THE CONTRACT RIG TOOL PUSHER. THE DECISION SHOULD BE MADE ONLY AS A LAST RESORT AND IN A SITUATION WHERE IT IS CLEAR THAT:

1. HUMAN LIFE AND PROPERTY ARE ENDANGERED.
2. THERE IS NO HOPE CONTROLLING THE BLOWOUT UNDER THE PREVAILING CONDITIONS AT THE WELL.

NOTIFY THE DISTRICT OFFICE IF TIME PERMITS, BUT DO NOT DELAY IF HUMAN LIFE IS IN DANGER.

INITIATE FIRST PHASE OF EVACUATION PLAN.

## IGNITION PROCEDURES

### INSTRUCTIONS FOR IGNITING THE WELL

1. TWO PEOPLE ARE REQUIRED FOR THE ACTUAL IGNITING OPERATION. THEY MUST WEAR SELF-CONTAINED BREATHING UNITS AND HAVE SAFETY ROPE ATTACHED. ONE MAN (TOOL PUSHER OR SAFETY ENGINEER) WILL CHECK THE ATMOSPHERE FOR EXPLOSIVE GASES WITH THE EXPLOSIMETER. THE OTHER MAN (DRILLING FOREMAN) IS RESPONSIBLE FOR IGNITING THE WELL.
2. PRIMARY METHOD TO IGNITE: 25 MM FLARE GUN WITH RANGE OF APPROXIMATELY 500 FEET.
3. IGNITE UP WIND AND DO NOT APPROACH ANY CLOSER THAN IS WARRANTED.
4. SELECT THE IGNITION SITE BEST FOR PROTECTION, AND WHICH OFFERS AN EASY ESCAPE ROUTE.
5. BEFORE FIRING, CHECK FOR PRESENCE OF COMBUSTIBLE GAS.
6. AFTER LIGHTING, CONTINUE EMERGENCY ACTION AND PROCEDURE AS BEFORE.
7. ALL UNASSIGNED PERSONNEL WILL LIMIT THEIR ACTIONS TO THOSE DIRECTED BY THE DRILLING FOREMAN.

REMEMBER: AFTER WELL IS IGNITED, BURNING HYDROGEN SULFIDE WILL CONVERT TO SULFUR DIOXIDE, WHICH IS ALSO HIGHLY TOXIC. DO NOT ASSUME THE AREA IS SAFE AFTER THE WELL IS IGNITED.

## H2S CONTINGENCY PLAN

### TRAINING REQUIREMENTS

WHEN WORKING IN AN AREA WHERE HYDROGEN SULFIDE GAS (H<sub>2</sub>S) MIGHT BE ENCOUNTERED, DEFINITE TRAINING REQUIREMENTS MUST BE CARRIED OUT. ALL COMPANIES WILL INSURE THAT ALL PERSONNEL AT THE WELL SITE WILL HAVE HAD ADEQUATE TRAINING IN THE FOLLOWING:

1. HAZARDS AND CHARACTERISTICS OF H<sub>2</sub>S.
2. PHYSICAL EFFECTS OF HYDROGEN SULFIDE ON THE HUMAN BODY.
3. TOXICITY OF HYDROGEN SULFIDE AND SULFUR DIOXIDE.
4. H<sub>2</sub>S DETECTION.
5. EMERGENCY RESCUE.
6. RESUSCITATORS.
7. FIRST AID AND ARTIFICIAL RESPIRATION.
8. EFFECTS OF H<sub>2</sub>S ON METALS.
9. LOCATION SAFETY.

### SERVICE COMPANY AND VISITING PERSONNEL

- A. EACH SERVICE COMPANY THAT WILL BE ON THIS WELL WILL BE NOTIFIED IF THE ZONE CONTAINS H<sub>2</sub>S.
- B. EACH SERVICE COMPANY MUST PROVIDE FOR THE TRAINING AND EQUIPMENT OF THEIR EMPLOYEES BEFORE THEY ARRIVE AT THE WELL SITE.
- C. EACH SERVICE COMPANY WILL BE EXPECTED TO ATTEND A WELL SITE BRIEFING.

## H2S CONTINGENCY PLAN

### EMERGENCY EQUIPMENT REQUIREMENTS

#### 1. SIGNS

- A. ONE SIGN LOCATED AT LOCATION ENTRANCE WITH THE FOLLOWING LANGUAGE:

(LEASE)  
CAUTION - POTENTIAL POISON GAS  
HYDROGEN SULFIDE  
NO ADMITTANCE WITHOUT AUTHORIZATION

#### 2. WIND SOCK -- WIND STREAMERS

- A. ONE 36" (IN LENGTH) WIND SOCK LOCATED AT PROTECTION CENTER, AT HEIGHT VISIBLE FROM RIG FLOOR.  
B. ONE 36" (IN LENGTH) WIND SOCK LOCATED AT HEIGHT VISIBLE FROM PJT AREAS.

#### 3. HYDROGEN SULFIDE DETECTOR AND ALARMS

- A. H2S MONITORS WITH ALARMS WILL BE LOCATED ON THE RIG FLOOR, AT THE BELL NIPPLE, AND AT THE FLOW LINE. THESE MONITORS WILL BE SET TO ALARM AT 10 PPM WITH RED LIGHT, AND TO ALARM AT 15 PPM WITH RED LIGHT AND AUDIBLE ALARM  
B. HAND OPERATED DETECTORS WITH TUBES.  
C. H2S MONITOR TESTER.

#### 4. CONDITION FLAGS

- A. ONE EACH OF ORANGE, YELLOW, AND RED CONDITION FLAGS TO BE DISPLAYED TO DENOTE CONDITIONS.

GREEN - NORMAL CONDITIONS  
YELLOW - POTENTIAL DANGER  
RED - DANGER, H2S PRESENT

- B. CONDITION FLAG MUST BE POSTED AT LOCATION IN EMERGENCY.

## H2S CONTINGENCY PLAN

### EMERGENCY EQUIPMENT REQUIREMENTS

#### 5. AUXILIARY RESCUE EQUIPMENT

- A. STRETCHER
- B. 100' LENGTH OF 5/8" NYLON ROPE.

#### 6. MUD INSPECTION DEVICES

GARRETT GAS TRAIN OR HACH TESTER FOR INSPECTION OF SULFIDE CONCENTRATION IN MUD SYSTEM.

#### 7. FIRE EXTINGUISHER

ADEQUATE FIRE EXTINGUISHERS SHALL BE LOCATED AT STRATEGIC LOCATIONS.

#### 8. BLOW OUT PREVENTION EQUIPMENT

THE WELL SHALL HAVE HYDRAULIC BOP EQUIPMENT FOR THE ANTICIPATED BHP OF 1500 PSI. EQUIPMENT IS TO BE TESTED ON INSTALLATION.

#### 9. COMBUSTIBLE GAS DETECTOR

THERE SHALL BE ONE COMBUSTIBLE GAS DETECTOR ON LOCATION AT ALL TIMES.

#### 10. BOP TESTING

BOP AND CHOKE LINE AND KILL LINE WILL BE TESTED

#### 11. AUDIO SYSTEM

RADIO COMMUNICATION WILL BE AVAILABLE AT THE RIG

- A. RIG FLOOR OR TRAILER
- B. VEHICLE

#### 12. SPECIAL CONTROL EQUIPMENT

HYDRAULIC BOP WORKING AT THE RIG FLOOR  
GROUND  
FOR TESTING

## H2S CONTINGENCY PLAN

### EMERGENCY EQUIPMENT REQUIREMENTS

#### 13. EVACUATION PLAN

EVACUATION ROUTES SHOULD BE ESTABLISHED PRIOR TO SPUDDING EACH WELL AND DISCUSSED WITH ALL RIG PERSONNEL.

#### 14. DESIGNATED AREA

- A. PARKING AND VISITOR AREA: ALL VEHICLES ARE TO BE PARKED AT A PREDETERMINED SAFE DISTANCE FROM THE WELLHEAD. THIS WILL BE THE DESIGNATED SMOKING AREA.
- B. TWO BRIEFING AREAS ON EITHER SIDE OF THE LOCATION AT THE MAXIMUM ALLOWABLE DISTANCE FROM THE WELL BORE SO THEY OFFSET PREVAILING WINDS PERPENDICULARLY, OR AT A 45-DEGREE ANGLE IF WIND DIRECTION TENDS TO SHIFT IN THE AREA.
- C. PROTECTION CENTERS OR IF A MOVABLE TRAILER IS USED, IT SHOULD BE DEPT UPWIND OF EXISTING WINDS. WHEN WIND IS FROM THE PREVAILING DIRECTIONS, BOTH PROTECTION CENTERS SHOULD BE ACCESSIBLE.



## H2S CONTINGENCY PLAN

STATUS CHECK LIST

NOTE ALL ITEMS ON THIS LIST MUST BE COMPLETED BEFORE DRILLING TO PRODUCTION CASING POINT.

1. SIGN AT LOCATION ENTRANCE.
2. TWO (2) WIND SOCKS LOCATED AS REQUIRED.
3. TWO (2) 30-MINUTE PRESSURE DEMAND AIR PACKS ON LOCATION FOR ALL RIG PERSONNEL AND MUD LOGGERS.
4. AIR PACK INSPECTED FOR READY USE
5. CASCADE SYSTEM AND HOSE LINE HOOK-UP.
6. CASCADE SYSTEM FOR REFILLING AIR BOTTLES.
7. SAFE BREATHING AREAS SET UP.
8. CONDITION FLAG ON LOCATION AND READY FOR USE
9. H2S DETECTION SYSTEM HOOKED UP.
10. H2S ALARM SYSTEM HOOKED UP AND READY
11. OXYGEN RESUSCITATOR ON LOCATION AND TESTED FOR USE.
12. STRETCHER ON LOCATION AT SAFETY TRAILER.
13. 1 - 100' LENGTH OF NYLON ROPE ON LOCATION
14. ALL RIG CREW AND SUPERVISORS TRAINED AS REQUIRED
15. ALL OUTSIDE SERVICE CONTRACTORS ADVISED OF POTENTIAL H2S HAZARD ON WELL.
16. H2S WARNING SIGN POSITED
17. H2S ALARM TESTED H2S DETECTOR TESTED AND OK.

## H2S CONTINGENCY PLAN

PROCEDURAL CHECK LIST

## PERFORM EACH TOUR:

1. CHECK FIRE EXTINGUISHERS TO SEE THAT THEY HAVE THE PROPER CHARGE.
2. CHECK BREATHING EQUIPMENT TO ENSURE THAT IT HAS NOT BEEN TAMPERED WITH.
3. MAKE SURE ALL THE H2S DETECTION SYSTEM IS OPERATIVE

## PERFORM EACH WEEK:

1. CHECK EACH PIECE OF BREATHING EQUIPMENT TO MAKE SURE THAT DEMAND REGULATOR IS WORKING. THIS REQUIRES THAT THE BOTTLE BE OPENED AND THE MASK ASSEMBLY BE PUT ON TIGHT ENOUGH SO THAT WHEN YOU INHALE, YOU RECEIVE AIR.
2. BLOW OUT PREVENTER SKILLS.
3. CHECK SUPPLY PRESSURE ON BOP ACCUMULATOR STAND BY SOURCE.
4. CHECK ALL SKA-PAC UNITS FOR OPERATION: DEMAND REGULATOR, ESCAPE BOTTLE AIR VOLUMES, SUPPLY BOTTLE OF AIR VOLUME
5. CHECK BREATHING EQUIPMENT MASK ASSEMBLY TO SEE THAT STRAPS ARE LOOSENED AND TURNED BACK, READY TO PUT ON
6. CHECK PRESSURE ON BREATHING EQUIPMENT AIR BOTTLES TO MAKE SURE THEY ARE CHARGED TO FULL VOLUME
7. CONFIRM PRESCRIPTIONAL SUPPLY AIR BOTTLES
8. PERFORM MASKING EQUIPMENT CHECK WITH ONSITE PERSONNEL
9. CHECK THE CONCENTRATION OF H2S IN THE AIR
10. CHECK THE CONCENTRATION OF H2S IN THE AIR
11. CHECK THE CONCENTRATION OF H2S IN THE AIR
12. CHECK THE CONCENTRATION OF H2S IN THE AIR

## H2S CONTINGENCY PLAN

GENERAL EVACUATION PLAN

THE DIRECT LINES OF ACTION PREPARED BY INDIAN FIRE & SAFETY, INC. TO PROTECT THE PUBLIC FROM HAZARDOUS GAS SITUATIONS ARE AS FOLLOWS:

1. WHEN THE COMPANY APPROVED SUPERVISOR (DRILLING FOREMAN, CONSULTANT, RIG PUSHER, OR DRILLER) DETERMINES THE H2S GAS CANNOT BE LIMITED TO THE WELL LOCATION AND THE PUBLIC WILL BE INVOLVED, HE WILL ACTIVATE THE EVACUATION PLAN. ESCAPE ROUTES ARE NOTED ON AREA MAP.
2. "COMPANY MAN" OR DESIGNEE WILL NOTIFY LOCAL GOVERNMENT AGENCY THAT A HAZARDOUS CONDITION EXISTS AND EVACUATION NEEDS TO BE IMPLEMENTED.
3. COMPANY SAFETY PERSONNEL THAT HAVE BEEN TRAINED IN THE USE OF H2S DETECTION EQUIPMENT AND SELF-CONTAINED BREATHING EQUIPMENT WILL MONITOR H2S CONCENTRATIONS, WIND DIRECTIONS, AND AREA OF EXPOSURE. THEY WILL DELINEATE THE OUTER PERIMETER OF THE HAZARDOUS GAS AREA. EXTENSION TO THE EVACUATION AREA WILL BE DETERMINED FROM INFORMATION GATHERED.
4. LAW ENFORCEMENT PERSONNEL (STATE POLICE, POLICE DEPT., FIRE DEPT., AND SHERIFF'S DEPT.) WILL BE CALLED TO AID IN SETTING UP AND MAINTAINING ROAD BLOCKS. ALSO, THEY WILL AID IN EVACUATION OF THE PUBLIC IF NECESSARY.

IMPORTANT: LAW ENFORCEMENT PERSONNEL WILL NOT BE ASKED TO COME INTO A CONTAMINATED AREA. THEIR ASSISTANCE WILL BE LIMITED TO UNCONTAMINATED AREAS. CONSTANT RADIO CONTACT WILL BE MAINTAINED WITH THEM

5. AFTER THE LEAKAGE OF GAS HAS BEEN CONTROLLED, COMPANY SAFETY PERSONNEL WILL DETERMINE WHEN THE AREA IS SAFE FOR RE-ENTRY

## H2S CONTINGENCY PLAN

### EMERGENCY ACTIONS

#### WELL BLOWOUT - IF EMERGENCY

1. EVACUATE ALL PERSONNEL IF POSSIBLE.
2. IF SOUR GAS - EVACUATE RIG PERSONNEL
3. IF SOUR GAS - EVACUATE PUBLIC WITHIN 3000 FT RADIUS OF EXPOSURE.
4. DON SCBA AND RESCUE.
5. CALL 911 FOR EMERGENCY HELP (FIRE DEPT AND AMBULANCE) AND NOTIFY SR. DRILLING FOREMAN AND DISTRICT FOREMAN.
6. GIVE FIRST AID.

#### PERSON DOWN LOCATION/FACILITY

1. IF IMMEDIATELY POSSIBLE, CONTACT 911 GIVE LOCATION AND WAIT FOR CONFIRMATION.
2. DON SCBA AND RESCUE.

## H2S CONTINGENCY PLAN

### TOXIC EFFECTS OF HYDROGEN SULFIDE

HYDROGEN SULFIDE IS EXTREMELY TOXIC. THE ACCEPTABLE CEILING CONCENTRATION FOR EIGHT-HOUR EXPOSURE IS 10 PPM, WHICH IS .001% BY VOLUME. HYDROGEN SULFIDE IS HEAVIER THAN AIR (SPECIFIC GRAVITY - 1.192) AND COLORLESS. IT FORMS AN EXPLOSIVE MIXTURE WITH AIR BETWEEN 4.3 AND 46.0 PERCENT BY VOLUME. HYDROGEN SULFIDE IS ALMOST AS TOXIC AS HYDROGEN CYANIDE AND IS BETWEEN FIVE AND SIX TIMES MORE TOXIC THAN CARBON MONOXIDE. TOXICITY DATA FOR HYDROGEN SULFIDE AND VARIOUS OTHER GASES ARE COMPARED IN TABLE I. PHYSICAL EFFECTS AT VARIOUS HYDROGEN SULFIDE EXPOSURE LEVELS ARE SHOWN IN TABLE II.

TABLE I  
TOXICITY OF VARIOUS GASES

COMMON NAME	CHEMICAL FORMULA	SPECIFIC GRAVITY (SC=1)	THRESHOLD LIMIT (1)	HAZARDOUS LIMIT (2)	LETHAL CONCENTRATION (3)
HYDROGEN CYANIDE	HCN	0.94	10 PPM	150 PPM/HR	300 PPM
HYDROGEN SULFIDE	H <sub>2</sub> S	1.18	10 PPM	250 PPM/HR	600 PPM
SULFUR DIOXIDE	SO <sub>2</sub>	2.21	5 PPM	-	1000 PPM
CHLORINE	CL <sub>2</sub>	2.45	1 PPM	4 PPM/HR	1000 PPM
CARBON MONOXIDE	CO	0.97	50 PPM	400 PPM/HR	1000 PPM
CARBON DIOXIDE	CO <sub>2</sub>	1.52	5000 PPM	5%	10%
METHANE	CH <sub>4</sub>	0.55	90,000 PPM	COMBUSTIBLE ABOVE 5% IN AIR	

1) THRESHOLD LIMIT - CONCENTRATION AT WHICH IT IS BELIEVED THAT ALL WORKERS MAY BE REPEATEDLY EXPOSED DAY AFTER DAY WITHOUT ADVERSE EFFECTS.

2) HAZARDOUS LIMIT - CONCENTRATION THAT WILL CAUSE DEATH WITH SHORT-TERM EXPOSURE.

3) LETHAL CONCENTRATION - CONCENTRATION THAT WILL CAUSE DEATH WITH SHORT-TERM EXPOSURE.

## H<sub>2</sub>S CONTINGENCY PLAN

### TOXIC EFFECTS OF HYDROGEN SULFIDE

TABLE II  
PHYSICAL EFFECTS OF HYDROGEN SULFIDE

<u>PERCENT (%)</u>	<u>PPM</u>	<u>CONCENTRATION GRAINS 100 STD. FT3*</u>	<u>PHYSICAL EFFECTS</u>
0.001	<10	00.65	Obvious and unpleasant odor.
0.002	10	01.30	Safe for 8 hours of exposure.
0.010	100	06.48	Kill smell in 3 – 15 minutes May sting eyes and throat.
0.020	200	12.96	Kills smell shortly; Stings eyes and throat.
0.050	500	32.96	Dizziness; Breathing ceases in a few minutes; Needs prompt artificial respiration.
0.070	700	45.36	Unconscious quickly; Death will result if not rescued promptly.
0.100	1000	64.30	Unconscious at once; Followed by death within minutes.

\*AT 15.00 PSIA AND 60°F

## H2S CONTINGENCY PLAN

USE OF SELF-CONTAINED BREATHING EQUIPMENT

1. WRITTEN PROCEDURES SHALL BE PREPARED COVERING SAFE USE OF SCBA'S IN DANGEROUS ATMOSPHERE, WHICH MIGHT BE ENCOUNTERED IN NORMAL OPERATIONS OR IN EMERGENCIES. PERSONNEL SHALL BE FAMILIAR WITH THESE PROCEDURES AND THE AVAILABLE SCBA.
  2. SCBA'S SHALL BE INSPECTED FREQUENTLY AT RANDOM TO INSURE THAT THEY ARE PROPERLY USED, CLEANED, AND MAINTAINED.
  3. ANYONE WHO MAY USE THE SCBA'S SHALL BE TRAINED IN HOW TO INSURE PROPER FACE-PIECE TO FACE SEAL. THEY SHALL WEAR SCBA'S IN NORMAL AIR AND THEN WEAR THEM IN A TEST ATMOSPHERE. (NOTE: SUCH ITEMS AS FACIAL HAIR {BEARD OR SIDEBURNS} AND EYEGLASSES WILL NOT ALLOW PROPER SEAL.) ANYONE THAT MAY BE REASONABLY EXPECTED TO WEAR SCBA'S SHOULD HAVE THESE ITEMS REMOVED BEFORE ENTERING A TOXIC ATMOSPHERE. A SPECIAL MASK MUST BE OBTAINED FOR ANYONE WHO MUST WEAR EYEGLASSES OR CONTACT LENSES.
  4. MAINTENANCE AND CARE OF SCBA'S:
    - A. A PROGRAM FOR MAINTENANCE AND CARE OF SCBA'S SHALL INCLUDE THE FOLLOWING:
      1. INSPECTION FOR DEFECTS, INCLUDING LEAK CHECKS.
      2. CLEANING AND DISINFECTING.
      3. REPAIR.
      4. STORAGE.
    - B. INSPECTION: SELF-CONTAINED BREATHING APPARATUS FOR EMERGENCY USE SHALL BE INSPECTED MONTHLY FOR THE FOLLOWING PERMANENT RECORDS KEPT OF THESE INSPECTIONS
      1. FULLY CHARGED CYLINDERS.
      2. REGULATOR AND WARNING DEVICE OPERATION.
      3. CONDITION OF FACE PIECE AND CONNECTORS.
      4. ELASTOMER OR RUBBER PARTS SHALL BE STRETCHED OR MASSAGED TO KEEP THEM PLIABLE AND PREVENT DETERIORATION.
1. ALL FULLY USED SCBA'S SHALL BE CLEANED OF ALL CONTAMINANTS AND DISINFECTED TO PREVENT CONTAMINATION OF PERSONNEL AND EQUIPMENT. THIS SHALL BE DONE IMMEDIATELY AFTER USE AND BEFORE STORAGE.

## H2S CONTINGENCY PLAN

USE OF SELF-CONTAINED BREATHING EQUIPMENT

5. PERSONS ASSIGNED TASKS THAT REQUIRES USE OF SELF-CONTAINED BREATHING EQUIPMENT SHALL BE CERTIFIED PHYSICALLY FIT FOR BREATHING EQUIPMENT USAGE BY THE LOCAL COMPANY PHYSICIAN AT LEAST ANNUALLY.
6. SCBA'S SHOULD BE WORN WHEN
  - A. ANY EMPLOYEE WORKS NEAR THE TOP OR ON TOP OF ANY TANK UNLESS TEST REVEALS LESS THAN 10 PPM OF H2S.
  - B. WHEN BREAKING OUT ANY LINE WHERE H2S CAN REASONABLY BE EXPECTED.
  - C. WHEN SAMPLING AIR IN AREAS TO DETERMINE IF TOXIC CONCENTRATIONS OF H2S EXISTS.
  - D. WHEN WORKING IN AREAS WHERE OVER 10 PPM H2S HAS BEEN DETECTED.
  - E. AT ANY TIME THERE IS A DOUBT AS TO THE H2S LEVEL IN THE AREA TO BE ENTERED.



## H2S CONTINGENCY PLAN

### RESCUE FIRST AID FOR H2S POISONING

#### DO NOT PANIC!

REMAIN CALM – THINK!

1. HOLD YOUR BREATH. (DO NOT INHALE FIRST; STOP BREATHING.)
2. PUT ON BREATHING APPARATUS.
3. REMOVE VICTIM(S) TO FRESH AIR AS QUICKLY AS POSSIBLE. (GO UP-WIND FROM SOURCE OR AT RIGHT ANGLE TO THE WIND. NOT DOWN WIND.)
4. BRIEFLY APPLY CHEST PRESSURE – ARM LIFT METHOD OF ARTIFICIAL RESPIRATION TO CLEAN THE VICTIM'S LUNGS AND TO AVOID INHALING ANY TOXIC GAS DIRECTLY FROM THE VICTIM'S LUNGS.
5. PROVIDE FOR PROMPT TRANSPORTATION TO THE HOSPITAL, AND CONTINUE GIVING ARTIFICIAL RESPIRATION IF NEEDED.
6. HOSPITAL(S) OR MEDICAL FACILITIES NEED TO BE INFORMED, BEFORE-HAND, OF THE POSSIBILITY OF H2S GAS POISONING - NO MATTER HOW REMOTE THE POSSIBILITY IS.
7. NOTIFY EMERGENCY ROOM PERSONNEL THAT THE VICTIM(S) HAS BEEN EXPOSED TO H2S GAS.

BESIDES BASIC FIRST AID, EVERYONE ON LOCATION SHOULD HAVE A GOOD WORKING KNOWLEDGE OF ARTIFICIAL RESPIRATION AS WELL AS FIRST AID FOR EYES AND SKIN CONTACT WITH LIQUID H2S. EVERYONE NEEDS TO MASTER THESE NECESSARY SKILLS.

EMERGENCY PHONE LIST  
*Governmental Agencies*

<i>Ambulance</i>	575-394-3258	911
<i>Fire Department</i>	575-394-3258	911
<i>City of Eunice</i>	575-394-2576	
<i>Police Department</i>	575-394-2112	
<i>AEROCARE</i>	806-74-8923	
<i>CHEMTREC</i>	1-800-424-9300	
<i>OSHA      Lubbock</i>	1-800-692-4204	

*CHEVRON U.S.A. Inc.*

<i>Richard Wallace -Operations Supervisor</i>	432-523-3655
<i>John Bermea - Art. Lift/Cor. Rep.</i>	432-523-3655
<i>Bryan Martin - Maintenance Planner</i>	432-523-3655
<i>Larry Ragland - Workover Rep.</i>	432-425-7380
<i>Darryl Ruthardt - Workover Rep.</i>	432-523-3655
<i>Park Bagley - Construction Rep.</i>	432-523-3655
<i>Ricky Heronema - HES Champion</i>	432-523-3655

SURFACE USE AND OPERATIONS PLAN FOR  
CHEVRON U S A. INC

AH Blinebry NCT-1 #51

760' FNL and 660' FWL

Section 29, Township 22 South, Range 38 East

Lea County, New Mexico

LOCATED: 5.75 Miles South-east of Eunice, NM

FEDERAL LEASE NUMBER: NMLC 053070

LEASE ISSUED: Lease is producing

ACRES IN LEASE: 1840 acres

RECORD LESSEE: Chevron U.S.A. Inc.

SURFACE OWNERSHIP: DK Boyd Cattle Company

GRAZING PERMITTEE: No

POOLS: Brunson Drinkard-Abo, Tubb oil & gas, Blinebry oil & gas

POOL RULES: Field rules are for no wells to be located closer than 330' to any 1/4 1/4 section line, to be 330' from the lease line, and 330' from the nearest well.

EXHIBITS:

- A. Access Road and Facilities Map
- B. Drilling Rig Layout Diagram
- C. Well Location and Acreage Dedication Plat

## PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHEVRON U.S.A., INC.
LEASE NO.:	NMLC032104
WELL NAME & NO.:	A.H. Blinebry NCT-1 #51
SURFACE HOLE FOOTAGE:	760' FNL & 660' FWL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 29, T. 22 S., R. 38 E., NMPM
COUNTY:	Lea County, New Mexico

### TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☐ **Special Requirements**
- ☒ **Construction**
  - Notification
  - Topsoil
  - Reserve Pit – Closed-loop mud system
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
  - Pipelines
  - Electric Lines
- ☐ **Reserve Pit Closure/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## **V. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Hobbs Field Station at (505) 393-3612 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

### **C. RESERVE PITS**

The operator has applied for a closed-loop system. The operator shall properly dispose of drilling contents at an authorized disposal site.

### **D. FEDERAL MINERAL MATERIALS PIT**

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

## VI. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,  
(575) 393-3612

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated 500 feet prior to drilling into the **Yates** formation. **If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. 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.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### B. CASING

**Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.**

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.**

**No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.**

**Possible lost circulation in the Artesia Group.**

1. The **8-5/8** inch surface casing shall be set **at approximately 1325 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **BLM geologist indicates that the salt could be shallower and if it occurs prior to reaching the above depth, the casing is to be set 25' above the salt.**
  - a. 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.
  - b. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - c. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **5-1/2** inch production casing is:
  - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Sundry with details of two stage job to be submitted and approved prior to doing work.**
3. 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 joints of the drill pipe will be installed prior to continuing drilling operations.

**C. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. System will be tested as a 3M.**



3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. 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.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. 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.

**D. DRILL STEM TEST**

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

**WWI 092908**

## **VII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color  
Shale Green, Munsell Soil Color Chart # 5Y 4/2

### **B. PIPELINES**

#### **STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES**

**A copy of the APD 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.**

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. 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.
2. 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 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way 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.
3. 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 activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder 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.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing.
  - (2) Earth-disturbing and earth-moving work.
  - (3) Blasting.
  - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or 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 resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up 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 responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.
7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.
8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.
9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
10. The holder shall minimize disturbance to existing fences and other improvements on public lands. 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 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. No permanent gates will be allowed unless approved by the Authorized Officer.
11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
15. Any cultural and/or paleontological resource (historic or prehistoric site or object)

discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. 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 cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

(March 1989)

### **C. ELECTRIC LINES**

#### **STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES**

**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.**

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. 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.
2. 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 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way 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.
3. 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), or resulting from the activity of the Right-of-Way holder 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.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or

additions shall be made by the holder without liability or expense to the United States.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. 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 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 the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. 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 proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.
- See attached reclamation plans.

## **VIII. INTERIM RECLAMATION & RESERVE PIT CLOSURE**

### **A. INTERIM RECLAMATION**

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.



## Seed Mixture 1, for Loamy 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 no 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 regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/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>	<u>lb/acre</u>
Plains lovegrass ( <i>Eragrostis intermedia</i> )	0.5
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5.0

\*Pounds of pure live seed:

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

## **X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS**

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.