#### District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

# State of New Mexico Energy Minerals and Natural Resources

Form C-101 March 4, 2004

Oil Conservation Division RECEIVED State Lease - 6 Copies
1220 South St. Francis Dr. Fee Lease - 5 Copies

> WITNESS CEMENTING OF SURFACE & INTERMEDIATE

CASING

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa					Santa Fe, I	VM 875		AUU 1 3 2004			ACTION DEPONE	
									PRARTE			MENDED REPORT
APPI Operator Na	LICATI me and Addr	ON FO	<u>R PERMI'</u>	T TO D	<u>RILL,</u>	RE-ENT	ER, DI	EEPE!	N, PLUGBA	CK, (	OR AD	D A ZONE
POGO PR			ANY						Number	178	91	
P.O. BC			2-7340						30 - O	ς .	335	74
Property Code	, , , , , , , , ,		5 Property							Wcl	<u> 335</u> 1No.	
Code	·		Name	LAKE W			<del></del>		· — · · · · · · · · · · · · · · · · · ·	<u> </u>		1
	1	T	T .			rface Loca			T			
UL or lot no.	Section 15	Township 19S	Range 26E	Lot		Feet from the 1750	SOU	outh line CH	Feet from the	EAS	West line T	EDDY
	<del></del>		<sup>8</sup> Proposed	l Botton	Hole 1	Location I	f Diffe	rent Fr	om Surface			<del></del>
UL or lot no.	Section	Township	Range	Lot	ldn	Feet from the	North/S	outh line	Feet from the	East/	West line	County
Proposed Po	ol I		0.		00		1º Propo	sed Pool	2	L		<u> </u>
Unde	s. Po	bet M	ile Di			tion and C	thar In	format	:			
UL or lot no.	S	T 1:									West line	G
I	Section 15	Township 19S	Range 26E	Lot	l	Feet from the	SOU'	South line TH	Feet from the	EAS		County EDDY
Depth to ground water	75 <b>'</b>	- <u>-</u>		Distance fresh wa	from neares	1 2100'			Distance from nearest LAKE surface water 2.5 1		KE Mc	MILLAN es SE.
11 Work Type C	Code		ll Type Code		13 Cable/F	Rotary	14 Lease Type Code			15 Ground Level Elevation 3313		
<sup>16</sup> Multiple	N	17 Pro	posed Depth		ROTA		19 Contractor		<u>P</u> actor		20 Spud Date	
	NO		10,000		MORE			UNKNO	<del></del>	\ \	VHEN A	APPROVED
		Г		Propos	sed Cas	sing and C	ement	Progra	m			<del></del>
Hole S	Size		ing Size	Casing	g weight/fo	oot	Setting D	epth	Sacks of Co	ement		Estimated TOC
25"			20"	NA Cor		or			Redi-mix		Sur	face
17	2"		3/8"		48		500'		550 Sx.			face
11"	/o#		5/8"	32		<del></del>		OSo 600 Sx.				face
7 7	/8''	5½'	•	17	/	10,000'			1000 Sx.		200	Q'FS
<sup>22</sup> Describe t	he proposed	program. If	this application	is to DEEPI	EN or PLU	JG BACK, give	e the data of	on the pre	sent productive zone	and pro	onosed nev	v productive zone.
			ram, if any. Uso						F		-p	, productive delice
0	114			SEE A	ATTACI	HED SHEE	T					
Fres	shu	Date	- Mud				$\bar{\phi}$					
<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be						e best	1/1	OII (	CONSERVAT	TION	DIVIS	ION
constructed according to NMOCD guidelines 🔀, a general permit 🗀, or							4/	OIL C			DI VIS	1011
an (attached) alternative OCD-approved plan						Appr	Approved by: TIM W. GUM					
Signature LOST Janice									ISTRICT I			/ISOR
Printed name: Joe T. Janiga						Title						
Title: Agent							oval Date:	AUG	2 4 2004 <sub>E</sub>	xpiratio	n Date:	AUG 2 4 200
E-mail Addre	ess:											
Date: 08	/11/04		Phone:			Cond	litions of A	pproval:	<b></b>			
505-391-8503						Attac	Attached NOTIFY OCD OF SPUD & TIME TO					

POGO PRODUCING COMPANY
LAKE WOOD "15" # 1
UNIT "I" SECTION 15
T19S-R26E EDDY CO. NM

- 1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redimix.
- 2. Drill  $17\frac{1}{2}$ " hole to 500'. Run and set 500' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + 2% CaCl, +  $\frac{1}{4}\#$  Flocele/Sx., circulate cement to surface.
- 3. Drill 11" hole to 2300'. Run and set 2300' of 8 5/8" 32# J-55 ST&C casing. Cement with 400 Sx. of Class "C" Light Weight cement + additives, tail in with 200 Sx. of Class "C" cement + 2% CaCl, + ½# Flocele/Sx., circulate cement to surface.
- 4. Drill 7 7/8" hole to 10,000'. Run and set 10,000' of  $5\frac{1}{2}$ " 17# L-80 LT&C casing. Cement in two stages with DV Tool at 4500'±. Cement 1st stage with 950 Sx. of Class "H" cement + additives, cement 2nd stage with 500 Sx. of Class "C" cement + additives estimate top of cement 2000' from surface.

## State of New Mexico

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

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87505

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505	WELL LOCATION AND	ACREAGE DEDICATION PLAT	□ AMENDED REPORT
API Number	Pool Code	Pool Name	
		WILDCAT - MORROW	
Property Code	Prop	Well Number	
	LAKE	WOOD 15	1
OGRID No.	Oper	ator Name	Elevation
17891	POGO PRODU	JCING COMPANY	3313'

#### Surface Location

1	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	1	15	19-S	26-E		1750	SOUTH	660	EAST	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 o	r Infill	Consolidation (	Code Ore	der No.	<u>.</u>			·
320									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STANDARD UNIT HAS BEE	N AFFROVED BY THE DIVISION
	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature  Joe T. Janica  Printed Name  Agent  Title  08/11/04  Date  SURVEYOR CERTIFICATION
GEODETIC COORDINATES NAL 27 NME  Y=602995.7 N X=490996.7 E	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 supervison and that the same is true and correct to the best of my belief.
LAT. = 32*39'26.87" N LONG. = 104*29'46.99" W	JULY 30, 2004  Date Surveyed LA  Signature & Seaf of Professional Surveyor  August 1.0970  Certificate No. GARY RIISON 12641

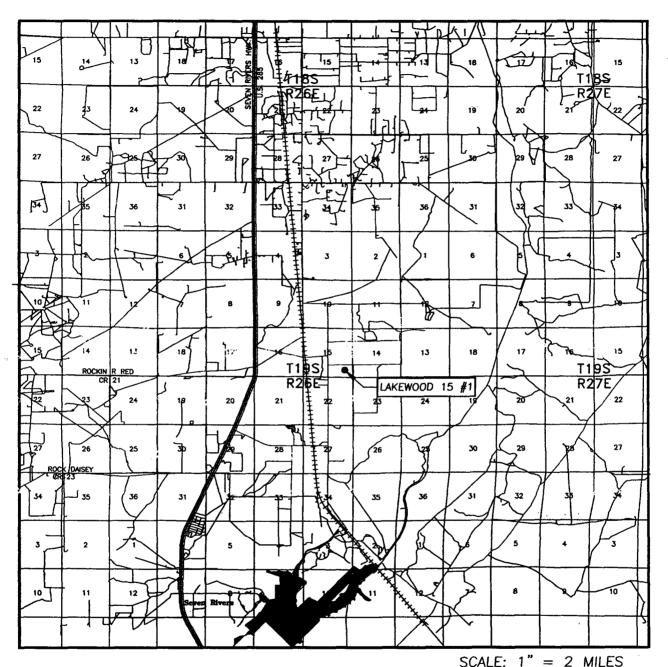
SECTION 15, TOWNSHIP	P 19 SOUT	H, RANG	E 26 EAS	ST, N.M.P.M., NEW MEXICO
				1
	150' NORT OFFSET	<sup>T</sup> H		
	<i>3314.8'</i>			🍑
				₹
	·			<b>\$</b>
150' WEST	LAKEWOOD 1	5 #1	150' EAST	\  .
00 0FFSET □ 3314.8'	ELEV. 331		□ <i>OFFSET</i> 3311.9'	009
1	LAT.=32°39'26. LONG.=104°29'4			1
				.
	□ 150' SOUT	H	·	
1	OFFSET 3311.0'			l
1				1
	600'			
DIRECTIONS TO LOCATION				
FROM THE INTERSECTION OF U.S. HWY # EDDY CO. RD. #35 (CRANE RD.) GO EAS		00 BBBBB	0 10	00 200 Feet
EDDY CO. RD. #35 (CRANE RD) APPROX. MILES AND TURN RIGHT ON EDDY CO. RI	. 1.5 D. #34.		Scale:1"=100'	
GO SOUTH 0.2 MILES. TURN LEFT ON CO #36 (SUNRAY RD) AND GO APPROX. 200 LOCATION IS 400' NORTH.		POGO	PRODUCING	COMPANY
ECONTION TO TOU NOTH.		LOCATED 1 AND 660 FEET	LAKEWOOD 15 #1 W 750 FEET FROM THE FROM THE EAST LIN	E SOUTH LINE NE OF SECTION 15,
PROVIDING SURVEYING SERVICE SINCE 1946 JOHN WEST SURVEYING COI			) SOUTH, RANGE 26 DY COUNTY, NEW MI	
JOHN WEST SURVETING CON 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117	Surv	vey Date: 7/30 Number: 04.11.	/04 Sheet 0970 Dr By: LA	1 of 1 Sheets Rev 1:N/A

Date: 8/02/04 Disk: CD#3

04110970

Scale:1"=100

# VICINITY MAP



SURVEY N.M.P.M.

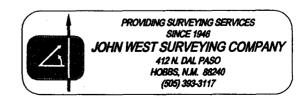
COUNTY EDDY

DESCRIPTION 1750' FSL & 660' FEL

ELEVATION 3313'

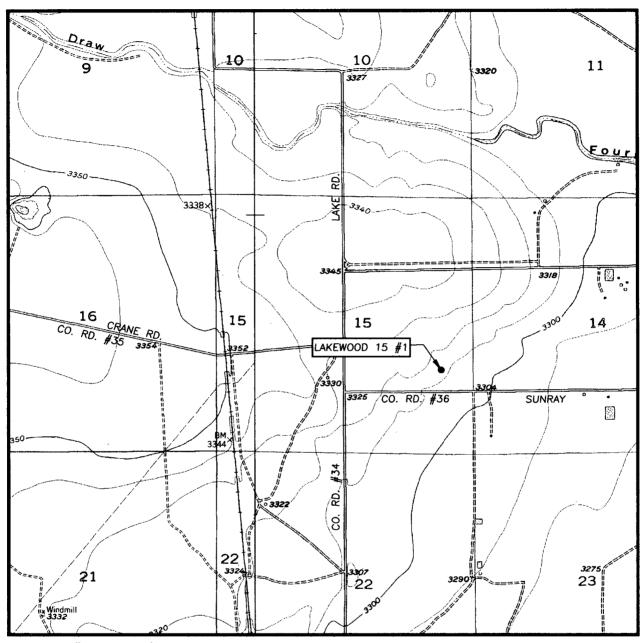
SEC. 15 TWP. 19-S RGE. 26-E

OPERATOR POGO PRODUCING COMPANY
LEASE LAKEWOOD 15





# LOCATION VERIFICATION MAP



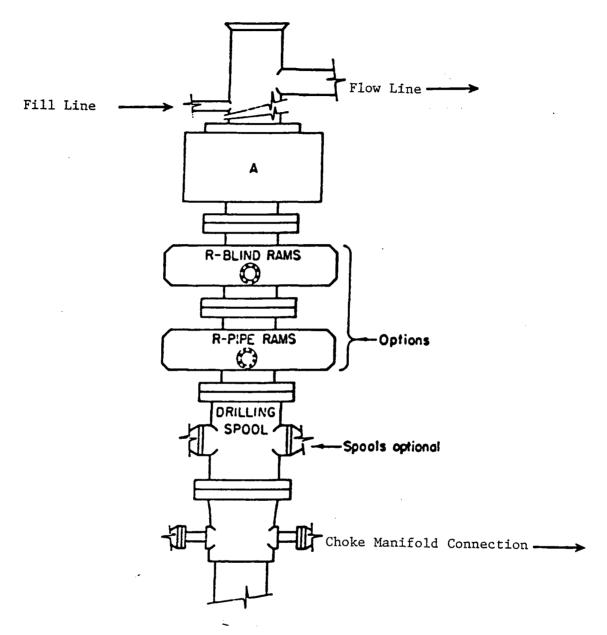
SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' LAKE MCMILLAN NORTH, N.M.

SEC. <u>15</u> TWP. <u>1</u>	<u>9-S</u> RGE. <u>2</u>	<u>6-E</u>
SURVEY	N.M.P.M.	
COUNTY	EDDY	
DESCRIPTION 175	0' FSL & 6	60' FEL
ELEVATION	3313'	<u> </u>
OPERATOR POGO	PRODUCING	COMPANY
LEASELA	KEWOOD 15	
U.S.G.S. TOPOGRA		



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



# ARRANGEMENT SRRA

1500 Series 5000 PSI WP



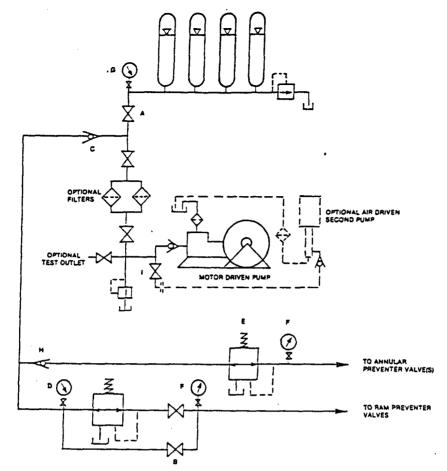


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

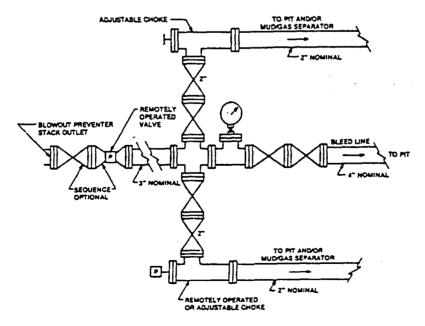


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

#### APPLICABILITY:

The provisions of this plan are effective when drilling operations are conducted in areas where zones may be penetrated that are known to contain, or may be reasonably expected to contain, hydrogen sulfide gas in concentrations of 100 parts per million or more.

# TRAINING REQUIREMENTS:

- A. When conducting drilling operations in an area where hydrogen sulfide gas might be encountered, all personnel at the well site will have had proper training in the following areas:
  - 1. The hazards and characteristics of hydrogen sulfide gas (H2S).
  - 2. Toxicity of hydrogen sulfide and sulfur dioxide.
  - 3. Hydrogen sulfide gas detectors, warning systems, evacuation procedures, and proper use and maintenance of personal protective equipment.
  - 4. Proper rescue procedures, first aid, and artificial respiration.
- B. In addition, supervisory personnel will be trained in the following areas:
  - 1. The effects of hydrogen sulfide on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
  - 2. Corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention and well control procedures.
  - 3. The contents and requirements of the Hydrogen Sulfide Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable hydrogen sulfide zone (within 3 days or 500 feet) and weekly hydrogen sulfide and well control drills for all personnel in each crew. The initial training session will include a review of the site specific Hydrogen Sulfide Drilling Operations Plan and the Public Protection Plan. This plan will be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

# A. Attached is a detailed well site diagram showing:

- Drilling rig orientation
- Prevailing wind direction (Southwest)
- Location of briefing areas
- Location of Caution/Danger Signs
- Location of hydrogen sulfide monitors
- Location of wind direction Indicators

# HYDROGEN SULFIDE SAFETY EQUIPMENT:

- A. All safety equipment and systems will be installed, tested and deemed operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone reasonably expected to contain hydrogen sulfide.
- B. During drilling operations, a flare line will be routed from the BOP manifold to the reserve pit. Should suspected sour gas be vented through the flair line, a flare pistol will be used to ignite the flare.
- C. Protective equipment for essential personnel will be installed and maintained as follows:
  - 1. 30-minute air packs will be maintained on the rig floor and near the briefing area.
  - 2. 30-minute work units will be maintained at the H2S trailer and/or on the rig floor.
  - 3. 30-minute escape units will be maintained on the rig floor.
  - 4. 300 cu. ft. air cylinders will be maintained in the H2S trailer.
  - 5. Associated breathing air equipment will also be installed and maintained.
  - 6. Hydrogen sulfide monitor will be located in the doghouse on the rig floor with sensors placed on the rig floor, at the bell nipple, the shale shaker, and in the pit area.
  - 7. An audible/visual alarm will be located near the doghouse on the rig floor.

## **VISUAL WARNING SYSTEMS:**

- A. High visibility Caution/Danger signs will be posted on roads providing direct access to the well location.
- B. Green, yellow, and red condition flags to be displayed to denote Normal Conditions, Potential Danger, and Danger, H2S Present.
- C. Wind socks to be located at the protection center and in the pit area to continuously indicate wind direction.

## **CIRCULATING MEDIUM:**

A. Drilling fluid to be conditioned to minimize the volume of H2S circulated to the surface.

# SPECIAL WELL CONTROL EQUIPMENT:

A. In addition to the normal BOP stack and choke manifold, a drilling head will be used to help control and H2S contaminated drilling.

## **WELL TESTING:**

A. Drill stem testing of zones known, or reasonably expected, to contain hydrogen sulfide in concentrations of 100 pps or more will use the closed chamber method of testing.

#### COMMUNICATION:

A. Radio communication will be available at the drilling rig and also in company vehicles.

## ADDITIONAL INFORMATION:

A. Additional information concerning Emergency Reaction Steps, Ignition Procedures, Training Requirements, and Emergency Equipment Requirements will be available on location at the well site.

POGO PRODUCING COMPANY
LAKE WOOD "15" # 1
UNIT "I" SECTION 15
T19S-R26E EDDY CO. NM

AUG 1 9 2004

## PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-500°	8.4-8.7	29-34	NC	Fresh water Spud Mud add paper to control
500-2700'	Fresh Water mud	29-38	NC Water	seepage.  Brine water, add paper to control seepage and use high viscosity sweeps to clean hole.
2300-10,000	8.4-8.7	29-40	NC*	Fresh water mud system use high viscosity sweeps to clean hole.

<sup>\*</sup> Water loss may have to be lowered in order to protect the pay formation, run logs, DST's, cur cores, and run casing. If this is required a Dris-Pac system will be used.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, viscosity, and water loss may have to be adjusted to meet these needs.

POGO PRODUCING COMPANY
LAKE WOOD "15" # 1
UNIT "!" SECTION 15
T19S-R26E EDDY CO. NM

According to information received from The Bureau of Land Management Roswell Field Office there is no indication of any H2S in the vicinity of the above

well location

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