

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Form C-101
May 27, 2004

CEMENT TO COVER ALL OIL, GAS AND WATER BEARING ZONES

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address POGO PRODUCING COMPANY P.O. BOX 10340 MIDLAND, TEXAS 79702-7340		OGRID Number 17891	
Property Code		Property Name H. BUCK STATE	
Proposed Pool I PIERCE CROSSING-BONE SPRING (50521) 96473		Proposed Pool 2	
Surface Location		Well No. 4H	

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	16	24S	29E		2310'	NORTH	330'	EAST	EDDY

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	16	24S	29E		2310'	NORTH	1650'	WEST	EDDY

Work Type Code N	Well Type Code O	Cable/Rotary ROTARY	Lease Type Code S	Ground Level Elevation
Multiple NO	Proposed Depth MD-10680' TVD-7608'	Formation BONE SPRING	Contractor CAPSTAR	Spud Date WHEN APPROVED
Depth to Groundwater 18' +		Distance from nearest fresh water well .9 Mi West		Distance from nearest surface water Pecos River 560' SOUTHWEST
Liner: Synthetic ☒ 12" mils thick Clay ☐		Pit Volume: 18Mbbbls		
Closed-Loop System ☐		Drilling Method: Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐		

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	Conductor	40'	Redi-mix	Surface
17 1/2"	13 3/8"	48#	250' 0250'	350 Sx.	Surface
12 1/2"	9 5/8"	40#	2860' 275'	1000 Sx.	Surface
8 1/2"-7 7/8"	5 1/2"	17#	MD-10680'	900 Sx.	2900' FS
			TVD-7608'		

** Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Surface casing to be set above Salado formation.
Please review off set geology for more information.

SEE ATTACHED SHEET

A PIT CLOSURE PLAN MUST BE APPROVED PRIOR TO THE COMMENCEMENT OF CLOSURE OPERATIONS.

NOTIFY OCD OF SPUD & TIME TO WITNESS CEMENTING OF SURFACE CASING

I, Joe T. Janica, complete to the best of my knowledge and belief, I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐ .		OIL CONSERVATION DIVISION	
Printed name: Joe T. Janica		Approved by: Jim W. Brown	
Title: Agent		Title: District II Supervisor	
E-mail Address:		Approval Date: NOV 28 2005 Expiration Date: NOV 28 2006	
Date: 11/22/05	Phone: 505-391-8503	Conditions of Approval Attached ☐	

11-22-05

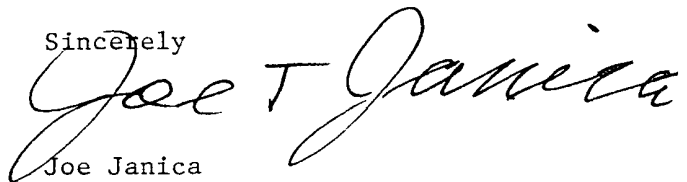
Mr. Bryan Arant,

Dear Bryan:

I have checked with the Bureau of Land Management on the possible presence of H₂S in this area and they have no record of any being encountered while drilling of any wells in this area.

Also Pogo Producing Company has drilled wells in sections 14, 15 and 16. They have drilled approximately 10 wells in 15 and have not encountered any H₂S.

Sincerely

A handwritten signature in cursive script that reads "Joe T Janica". The signature is written in black ink and is positioned above the printed name and title.

Joe Janica

Agent For Pogo Producing Company

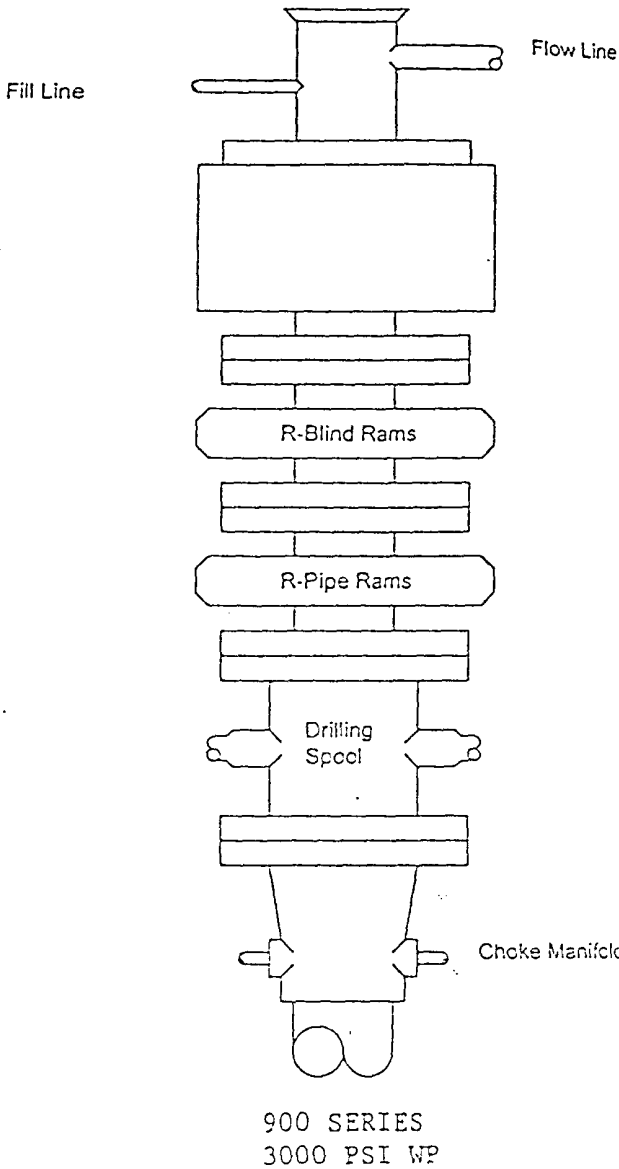
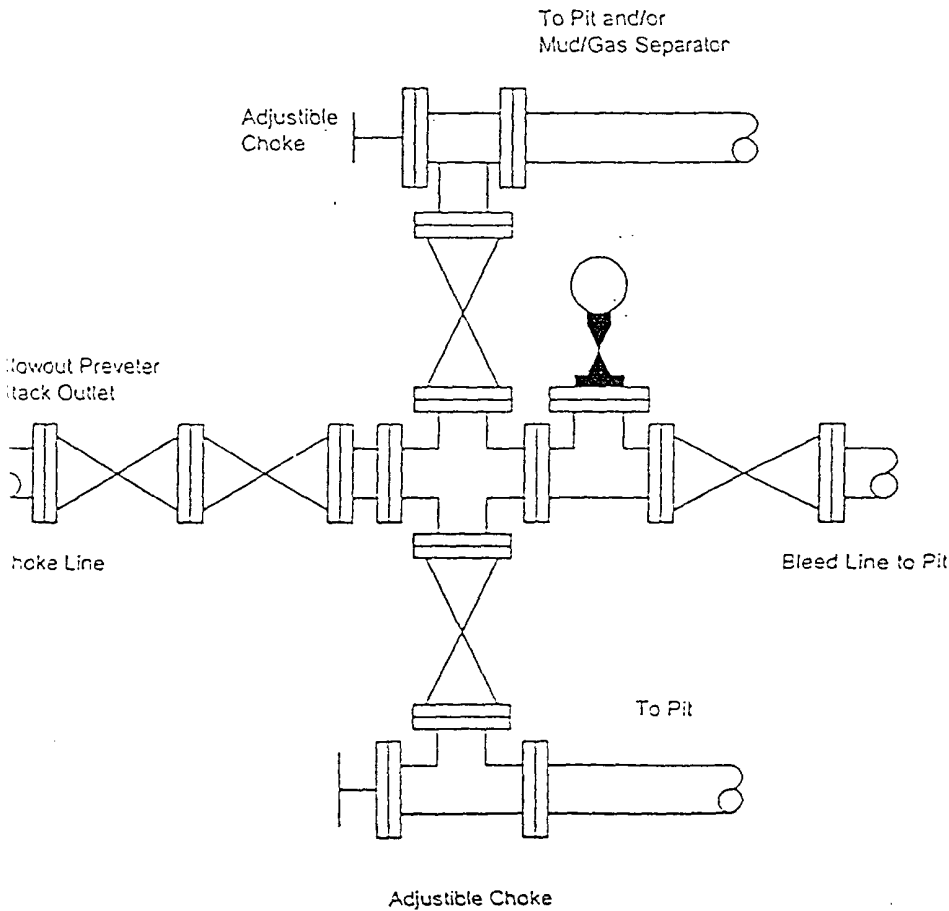
POGO PRODUCING COMPANY
H. BUCK STATE # 4H
SL UNIT "H" SEC. 16
BHL UNIT "F": SEC. 16
T24S-R29E EDDY CO. NM

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 350'. Run and set 350' of 13 3/8" 48# H-40 ST&C casing. Cement with 150 Sx. of 65/35/6 Class "C" POZ/Gel, tail in with 200 Sx. of Class "C" cement + ¼# Flocele/Sx, + 2% CaCl, circulate cement to surface.
3. Drill 12¼" hole to 2860'. Run and set 2860' of 9 5/8" 40# J-55 LT&C casing. Cement with 800 Sx. of Class "C" 65/35/6 POZ-GEL + 5% Salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl. Circulate cement to surface. Lead cement volume may have to be adjusted after flius caliper is run.
4. Drill 8½" hole through curve to 7730'. Change to drilling a 7 7/8" hole to complete lateral. Run and set 10,680' of 5½" 17# N-80 LT&C & BTC to MD of 10,680', TVD 7608'. Cement with 900 Sx. of Class "H" Premeium Plus cement + additives, estimate top of cement 2900' from surface.

BLOWOUT PREVENTER SYSTEM

3000 PSI

Choke Manifold Assembly for 5M WP System



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2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

NOV 16 2005

MIDLAND
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-34444	Pool Code 50371	Pool Name Pierce Crossing Bone Spring
Property Code 13081	Property Name H BUCK STATE	Well Number 4H
OGRID No. 017891	Operator Name POGO PRODUCING COMPANY	Elevation 2927'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	16	24 S	29 E		2310	NORTH	330	EAST	EDDY

Bottom Hole Location If Different From Surface

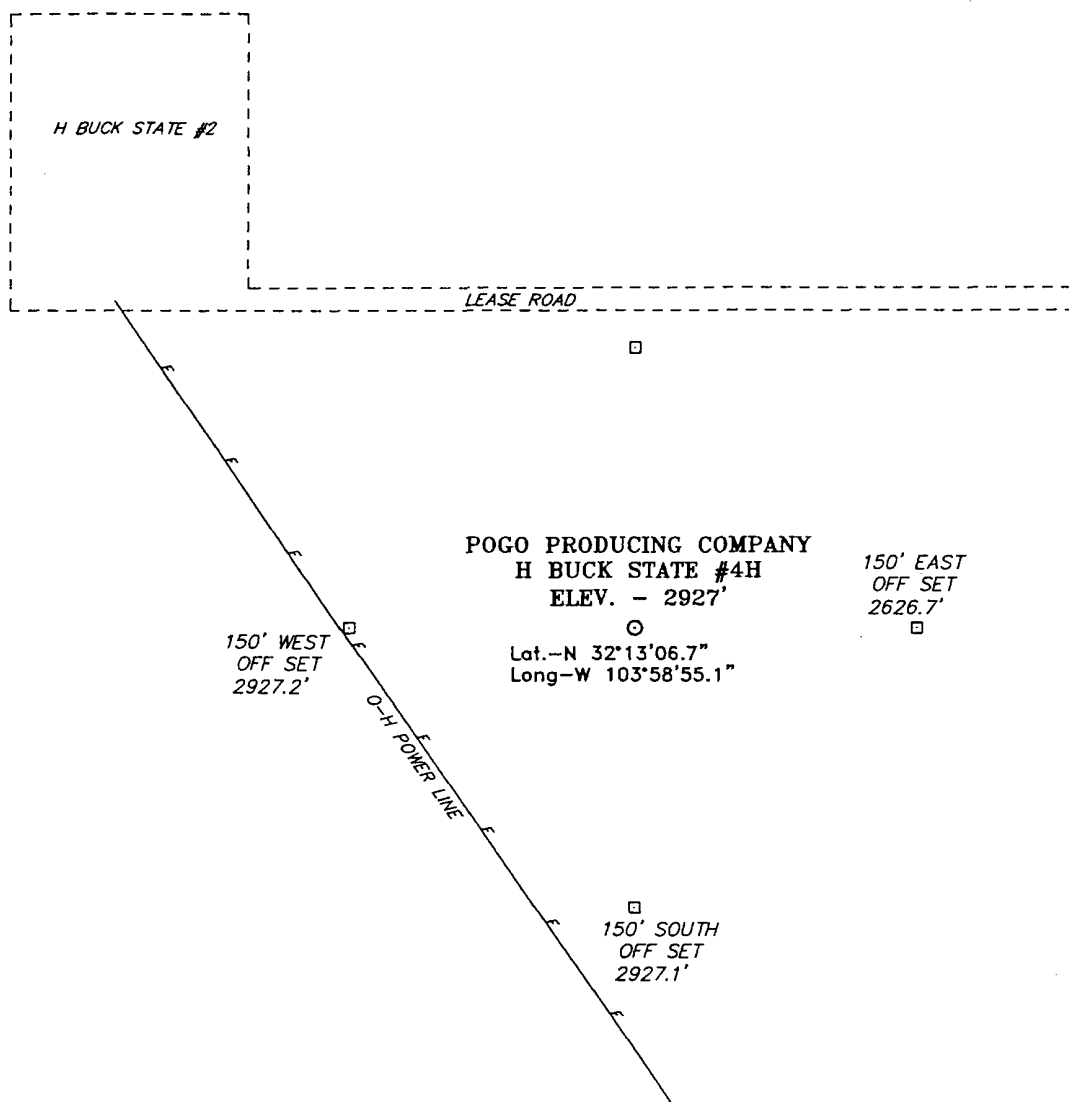
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	16	24 S	29 E		2310	NORTH	1650	WEST	EDDY

Dedicated Acres 120	Joint or Infill	Consolidation Code	Order No.
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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

RECEIVED NOV 20 2005 OIL ARTESIA	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Cathy Wright Signature Cathy Wright Printed Name Sr. Eng. Tech Title 11/28/05 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 11, 2005 Date Surveyed Signature & Seal of Professional Surveyor W.O. No. 5970 Certificate No. Gary Jones 7977 BASIN SURVEYS
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SECTION 16, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



100 0 100 200 FEET

SCALE: 1" = 100'

Directions to Location:

FROM MALAGA, GO EAST ON CO. RD. 720 FOR 0.8 MILE TO CO. RD. 745; THENCE EASTERLY ON 745 FOR 3.0 MILES TO CO. RD. 788; THENCE SOUTH ON 788 FOR 1.2 MILE TO LEASE ROAD; THENCE SOUTHEAST ON LEASE ROAD FOR 2.3 MILES; THENCE SOUTH FOR 0.2 MILE TO LOCATION.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 5970 Drawn By: K. GOAD

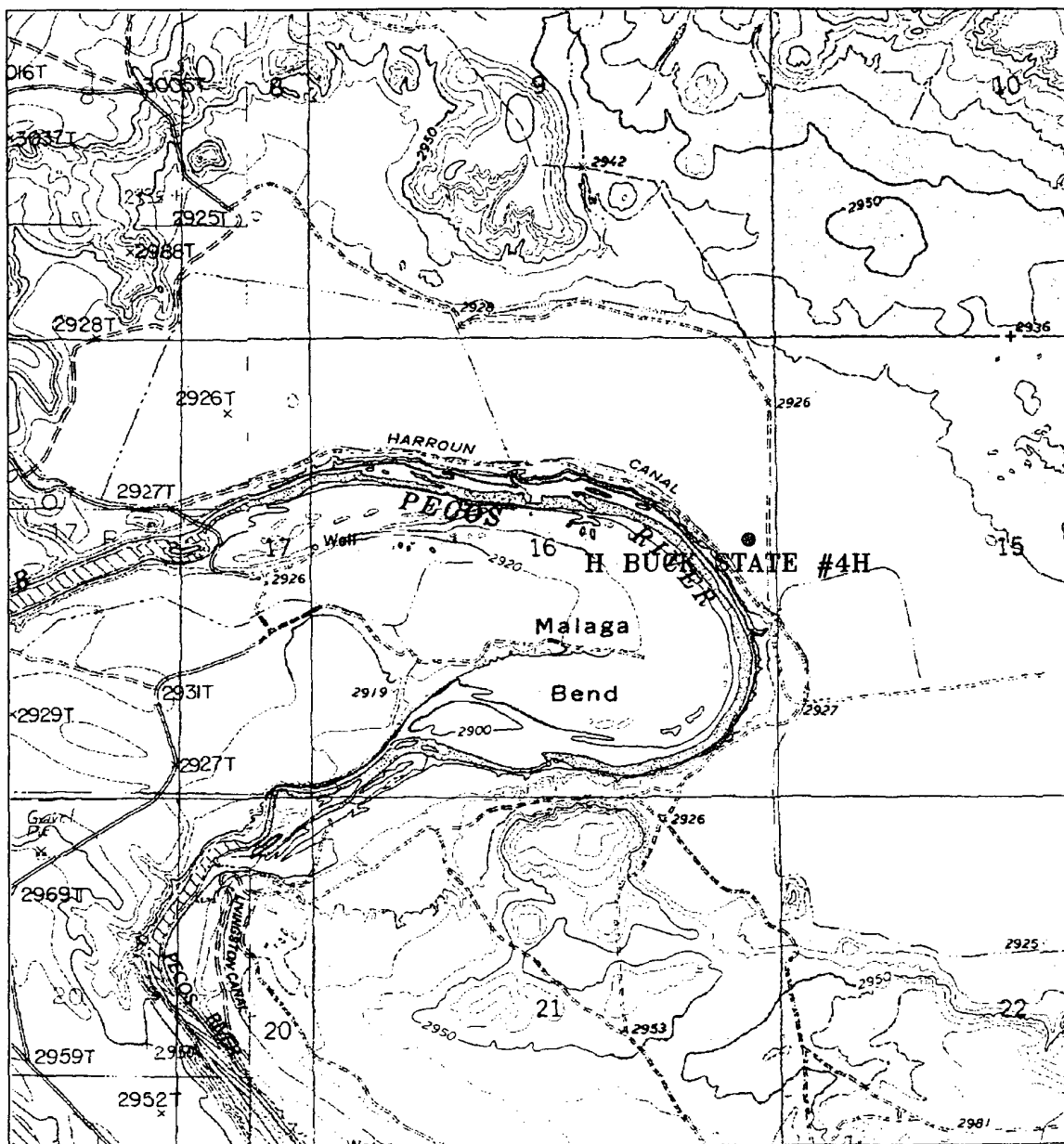
Date: 11-14-2005 Disk: KJG CD#1 - 5970A.DWG

POGO PRODUCING CO.

REF: H BUCK STATE #4H / Well Pad Topo

THE H BUCK STATE No. 4H LOCATED 2310' FROM THE NORTH LINE AND 330' FROM THE EAST LINE OF SECTION 16, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 11-11-2005 Sheet 1 of 1 Sheets



H BUCK STATE #4H

Located at 2310' FNL and 330' FEL
 Section 16, Township 24 South, Range 29 East,
 N.M.P.M., Eddy County, New Mexico.

**basin
surveys**
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

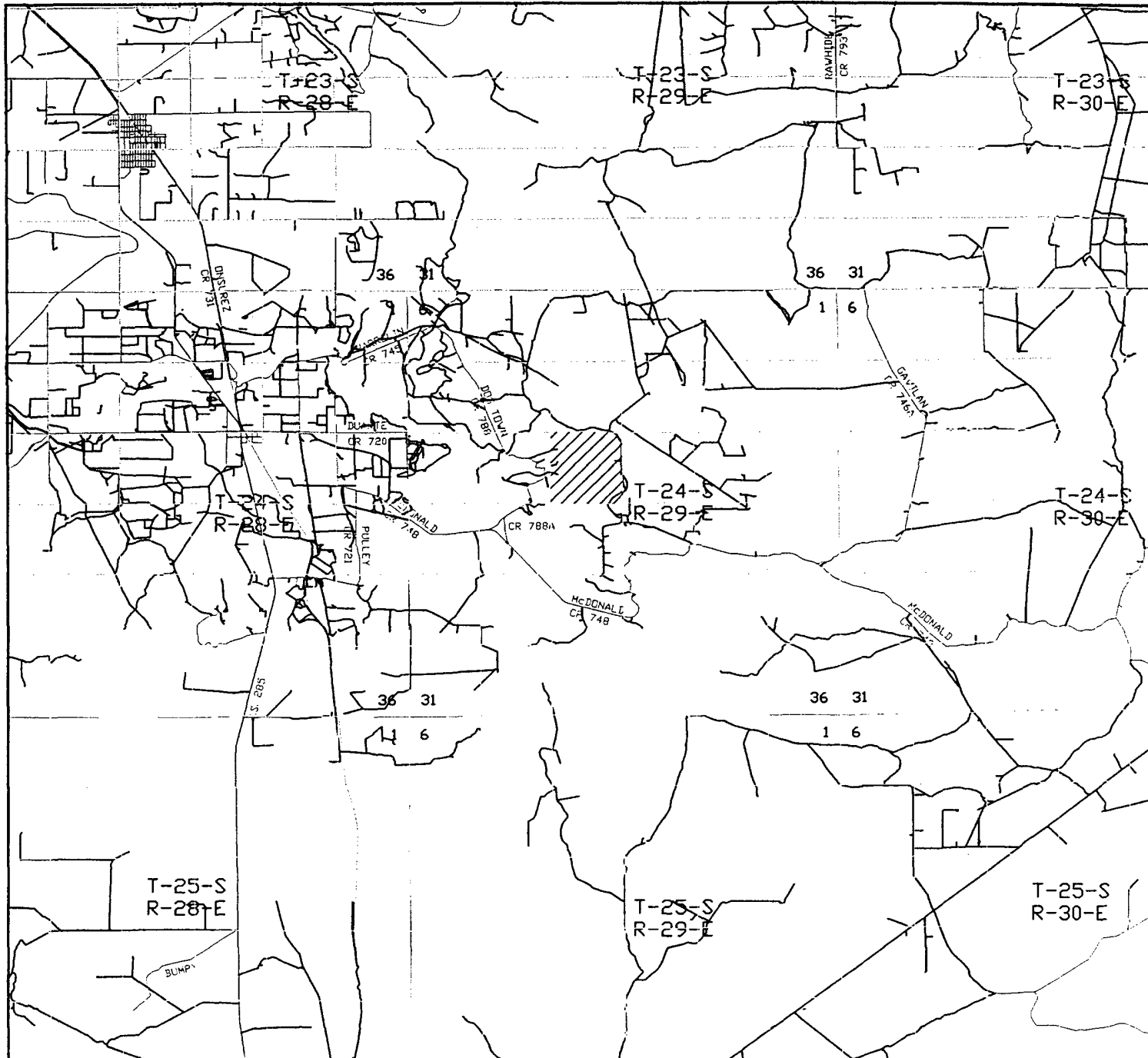
W.O. Number: 5970AA - KJG CD#1

Survey Date: 11-11-2005

Scale: 1" = 2000'

Date: 11-14-2005

**POGO
PRODUCING
COMPANY**



H BUCK STATE #4H

Located at 2310' FNL and 330' FEL
 Section 16, Township 24 South, Range 29 East,
 N.M.P.M., Eddy County, New Mexico.

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 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: 5970AA - KJG CD#1

Survey Date: 11-11-2005

Scale: 1" = 2 MILES

Date: 11-14-2005

POGO
PRODUCING
COMPANY

COPYRIGHT 1990 MITCHELL ENGINEERING, PO BOX 1492, GOLDEN, CO. 80402, USA (303) 273 3744

LONG'S METHOD OF SURVEY COMPUTATION**OBLIQUE CIRCULAR ARC INTERPOLATION**

0	MD OF INTERPOLATION DEPTH, (feet)
#N/A	TVD COORDINATE OF THE DEPTH (feet)
#N/A	N/S COORDINATE OF DEPTH (feet)
#N/A	E/W COORDINATE OF DEPTH (feet)

3 D DISTANCE BETWEEN STATION A AND STATION B

DISTANCE TABLE

STATION A	STATION B
0.00	ft

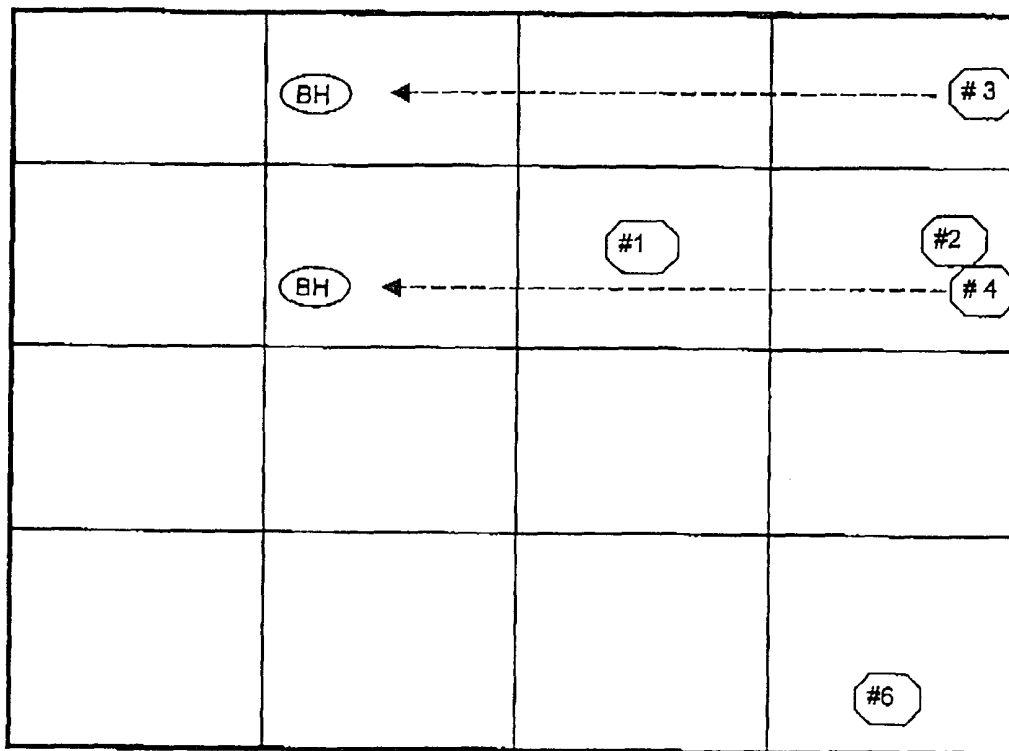
TABLE OF SURVEY STATIONS

Calculator =

STA #	ΔMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N/S- ft	E/W- ft	DLS deg/100FT
1	TIE POINT =>	0	0	7132.00	7132.00	0.00	0.00	-
2	100	12	180	7232.00	7231.27	-10.43	0.00	12.00
3	100	24	180	7332.00	7328.20	-41.28	0.00	12.00
4	100	36	180	7432.00	7412.85	-91.19	0.00	12.00
5	100	48	180	7532.00	7486.83	-157.99	0.00	12.00
6	100	60	180	7632.00	7545.50	-238.73	0.00	12.00
7	100	72	180	7732.00	7588.10	-329.92	0.00	12.00
8	100	84	180	7832.00	7606.85	-427.58	0.00	12.00
9	50	90	180	7882.00	7609.46	-477.46	0.00	12.00
10	100	90	180	7982.00	7609.48	-577.48	0.00	0.00
11	100	90	180	8082.00	7609.48	-677.48	0.00	0.00
12	100	90	180	8182.00	7609.48	-777.48	0.00	0.00
13	100	90	180	8282.00	7609.48	-877.48	0.00	0.00
14	100	90	180	8382.00	7609.48	-977.48	0.00	0.00
15	100	90	180	8482.00	7609.48	-1077.48	0.00	0.00
16	100	90	180	8582.00	7609.48	-1177.48	0.00	0.00
17	100	90	180	8682.00	7609.48	-1277.48	0.00	0.00
18	100	90	180	8782.00	7609.48	-1377.48	0.00	0.00
19	100	90	180	8882.00	7609.48	-1477.48	0.00	0.00
20	100	90	180	8982.00	7609.48	-1577.48	0.00	0.00
21	100	90	180	9082.00	7609.48	-1677.48	0.00	0.00
22	100	90	180	9182.00	7609.48	-1777.48	0.00	0.00
23	100	90	180	9282.00	7609.48	-1877.48	0.00	0.00
24	100	90	180	9382.00	7609.48	-1977.48	0.00	0.00
25	100	90	180	9482.00	7609.48	-2077.48	0.00	0.00
26	100	90	180	9582.00	7609.48	-2177.48	0.00	0.00
27	100	90	180	9682.00	7609.48	-2277.48	0.00	0.00
28	100	90	180	9782.00	7609.48	-2377.48	0.00	0.00
29	100	90	180	9882.00	7609.48	-2477.48	0.00	0.00
30	100	90	180	9982.00	7609.48	-2577.48	0.00	0.00
31	100	90	180	10082.00	7609.48	-2677.48	0.00	0.00
32	100	90	180	10182.00	7609.48	-2777.48	0.00	0.00
33	100	90	180	10282.00	7609.48	-2877.48	0.00	0.00
34	100	90	180	10382.00	7609.48	-2977.48	0.00	0.00
35	100	90	180	10482.00	7609.48	-3077.48	0.00	0.00
36	100	90	180	10582.00	7609.48	-3177.48	0.00	0.00
37	100	90	180	10682.00	7609.48	-3277.48	0.00	0.00

H. Buck State Well Groupings

Sec 16, T-24-S, R-29-E, Eddy County, New Mexico



Well Name	Legal Location in 15	Depth and Strata	Current Prod Zone
H. Buck State # 1 =	1982 FSL & 1961 FEL	TD =7850 1st Bone Sand	Delaware Production
H. Buck State # 2 =	330 FNL & 1980 FEL	TD =7950 1st Bone Sand	Delaware Production
H. Buck State # 6 =	330 FSL & 660 FEL	TD 7815' = 1st Bone Sand	Delaware Production
H. Buck State # 3 =	660 FNL & 330 FEL	TVD 7608 1st Bone Sand	Bone Springs Prod
H. Buck State # 4 =	2310 FNL & 330 FEL	TVD 7608 1st Bone Sand	Bone Springs Prod