

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

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

OCT 03 2007

OCD-ARTESIA

SUBMIT IN TRIPLICATE- Other instructions on reverse side.		5. Lease Serial No. NM-86024
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator Pogo Producing Company		7. If Unit or CA/Agreement, Name and/or No.
3a. Address P.O. Box 10340, Midland, TX 79702	3b. Phone No. (include area code) 432-685-8100	8. Well Name and No. Cypress 34 Federal #5
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 990' FNL & 1690' FWL, Section 34, T23S, R29E		9. API Well No. 30-015-35693
		10. Field and Pool, or Exploratory Area Cedar Canyon Bone Spring
		11. County or Parish, State Eddy County, NM

CONFIDENTIAL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other <u>drill operations</u>
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Intermediate Csg - Drld 11" hole to 3002'. TD reached @ 22:00 hrs 07/30/07. Ran 71 jts 8-5/8" 32# K-55 LT&C csg. Cmt'd w/ 1000 sks Cl "C" @ 12.4 ppg followed by 200 sks Cl "C" @ 14.8 ppg. Plug down @ 18:00 hrs 07/31/07. Circ 238 sks to surface. WOC 24 hrs. Make cut-off. Install WH. NU BOP & test to 2000# ok. Test csg to 1250# for 30 mins.

TD & Production Csg - Drld 7-7/8" hole to 7400'. TD reached @ 12:00 hrs 08/09/07. Logged well w/ Halliburton. Cont drilling 7-7/8" hole w/ directional tools to 10,875'. TD reached @ 16:15 hrs 08/28/07. Ran 244 jts 5-1/2" 17# N-80 & L-80 csg. Cmt'd 1st stage w/ 1470 sks Cl C. Cmt'd 2nd stage w/ 800 sks Cl C. Circ 181 sks to surface. Cmt'd 3rd stage w/ 550 sks 35:65 POZ C followed by 100 sks Cl C + 1% CaCl₂. Circ 150 sks to surface. Test csg to 1000# for 30 mins. CBL ran 09/12/07.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Cathy Wright

Title

Sr. Eng Tech

Signature

Date

10/01/07

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice 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.

Title

Date

Office

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

(Instructions on page 2)

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-015-3569 3	² Pool Code 11520	³ Pool Name Cedar Canyon Bone Spring
⁴ Property Code 35899	⁵ Property Name Cypress 34 Federal	⁶ Well Number 5
⁷ OGRID No. 017891	⁸ Operator Name Pogo Producing Company	⁹ Elevation 3035'

CONFIDENTIAL**¹⁰ Surface Location**

UL or lot no. C	Section 34	Township 23S	Range 29E	Lot Idn	Feet from the 900	North/South line North	Feet from the 1690	East/West line West	County Eddy
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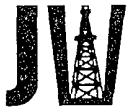
¹¹ Bottom Hole Location If Different From Surface

UL or lot no. A	Section 34	Township 23S	Range 29E	Lot Idn	Feet from the 344.6	North/South line North	Feet from the 453.3	East/West line East	County Eddy
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¹² Dedicated Acres 120	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

¹⁶ Producing Area Project Area	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division Signature: <u>Cathy Wright</u> Date: <u>10/01/07</u> Printed Name: <u>Cathy Wright</u>	
	¹⁸ 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.	
	Date of Survey Signature and Seal of Professional Surveyor	
	Certificate Number	



DRILLING INC. Oil Well Drilling Contractor

RECEIVED

Post Office Box 160 • Artesia, NM 88211-0160 • Office (505) 748-8704 • Fax (505) 748-8719
AUG 15 2007

August 13, 2007

MIDLAND

POGO Producing Company
P.O. Box 1034
Midland, Texas 79702

Re: Cypress 34 Fed. #5
Sec.34, T-23-S, R-29-E
Eddy County, New Mexico

Attn: Richard Wright

The following is a Deviation Survey on the referenced well in Eddy County, New Mexico:

143' - 1/2 °	1892' - 1/2 °	3570' - 1 1/2 °	5642' - 3/4 °
321' - 1/2 °	2171' - 1 °	3878' - 1 °	5957' - 1 °
476' - 1 °	2389' - 1 1/4 °	4159' - 1/4 °	6234' - 3/4 °
715' - 1 °	2606' - 2 °	4470' - 1/4 °	6544' - 1/2 °
966' - 1 °	2824' - 3 °	4778' - 1/2 °	
1302' - 1 °	2980' - 1 1/2 °	5059' - 1 °	
1612' - 3/4 °	3293' - 1 °	5368' - 1/4 °	

CONFIDENTIAL



OFFICIAL SEAL
Barbara L. Carey
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: Sept. 1, 2009

Sincerely,

Gary W. Chappell
Contracts Manager

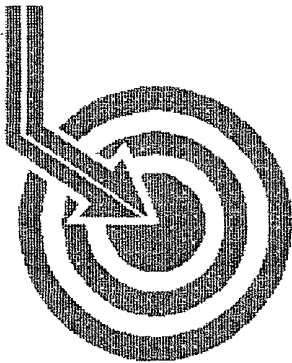
STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 13th day of August, 2007 by Gary W. Chappell.

MY COMMISSION EXPIRES

Sept. 1, 2009

Barbara L. Carey
NOTARY PUBLIC



Scientific Drilling

POGO

Field: Cedar Canyon
Site: Eddy County, NM
Well: Cypress 34 Federal #5H
Wellpath: VH - Job #32K0807677
Survey: 08/09/07

CONFIDENTIAL

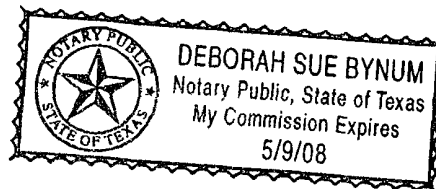
This survey is correct to the best of my knowledge
and is supported by actual field data.

Deborah Sue Bynum.....Company Representative

Notorized this date 17th of September, 2007.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International

Survey Report

Company: POGO	Date: 09/07/2007	Time: 12:00:22	Page: 1
Field: Cedar Canyon	Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North		
Site: Eddy County, NM	Vertical (TVD) Reference: SITE 0.0		
Well: Cypress 34 Federal #5H	Section (VS) Reference: Well (0.00N,0.00E,155.70Azi)		
Wellpath: VH - Job #32K0807677	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 08/09/07	Start Date: 08/09/2007
KSRG 0'-7361'	
Company: Scientific Drilling Internatio	Engineer: Madrid w/P&M
Tool: Keeper, Keeper Gyro	Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.55	316.06	100.00	-0.45	0.35	-0.33	0.55	0.48	316.06
200.00	0.32	307.07	200.00	-1.15	0.86	-0.89	0.24	1.24	314.04
300.00	0.37	348.35	299.99	-1.71	1.34	-1.18	0.25	1.79	318.79
400.00	0.55	12.80	399.99	-2.41	2.13	-1.14	0.26	2.41	331.91
500.00	0.34	354.36	499.99	-3.07	2.89	-1.06	0.25	3.08	339.89
600.00	0.34	36.57	599.99	-3.50	3.43	-0.91	0.24	3.54	345.11
700.00	0.13	261.04	699.99	-3.67	3.65	-0.85	0.44	3.74	346.93
800.00	0.17	341.16	799.99	-3.85	3.77	-1.01	0.20	3.90	345.05
900.00	0.19	358.52	899.98	-4.15	4.07	-1.06	0.06	4.21	345.44
1000.00	0.52	81.69	999.98	-4.18	4.31	-0.61	0.53	4.35	351.89
1100.00	0.54	72.46	1099.98	-4.00	4.51	0.28	0.09	4.52	3.61
1200.00	0.56	54.24	1199.97	-4.04	4.94	1.13	0.18	5.07	12.89
1300.00	0.48	0.03	1299.97	-4.52	5.65	1.53	0.48	5.85	15.14
1400.00	0.60	325.78	1399.97	-5.41	6.50	1.23	0.34	6.61	10.75
1500.00	0.91	315.82	1499.96	-6.68	7.50	0.39	0.34	7.51	2.94
1600.00	0.94	306.91	1599.94	-8.14	8.56	-0.82	0.15	8.60	354.50
1700.00	0.91	305.54	1699.93	-9.55	9.52	-2.13	0.04	9.75	347.41
1800.00	0.87	302.93	1799.92	-10.87	10.39	-3.41	0.06	10.94	341.83
1900.00	0.89	304.39	1899.91	-12.18	11.24	-4.69	0.03	12.18	337.37
2000.00	0.80	306.42	1999.90	-13.45	12.10	-5.89	0.09	13.45	334.03
2100.00	0.99	319.48	2099.88	-14.89	13.17	-7.01	0.28	14.92	331.96
2200.00	1.07	331.68	2199.87	-16.65	14.64	-8.02	0.23	16.70	331.30
2300.00	1.32	356.80	2299.85	-18.65	16.62	-8.52	0.57	18.68	332.84
2400.00	1.89	78.54	2399.82	-19.36	18.09	-6.97	2.14	19.39	338.93
2500.00	2.15	92.73	2499.76	-18.14	18.33	-3.48	0.56	18.66	349.24
2600.00	2.36	112.62	2599.68	-15.79	17.45	0.29	0.81	17.45	0.96
2700.00	2.63	117.04	2699.59	-12.49	15.62	4.24	0.33	16.18	15.17
2800.00	3.21	127.04	2799.46	-8.24	12.89	8.51	0.77	15.45	33.45
2900.00	2.98	131.67	2899.31	-3.41	9.47	12.69	0.34	15.84	53.26
3000.00	1.85	137.74	2999.22	0.50	6.55	15.72	1.16	17.03	67.38
3100.00	0.90	158.70	3099.19	2.82	4.62	17.09	1.06	17.70	74.86
3200.00	0.65	159.94	3199.18	4.17	3.36	17.57	0.25	17.89	79.18
3300.00	0.54	157.21	3299.18	5.20	2.39	17.95	0.11	18.10	82.41
3400.00	0.26	136.15	3399.17	5.89	1.79	18.29	0.31	18.37	84.40
3500.00	0.41	134.39	3499.17	6.44	1.38	18.70	0.15	18.75	85.78
3600.00	0.13	184.72	3599.17	6.87	1.02	18.94	0.34	18.97	86.93
3700.00	0.34	144.02	3699.17	7.26	0.66	19.11	0.26	19.12	88.01
3800.00	0.27	155.84	3799.17	7.78	0.21	19.38	0.09	19.38	89.39
3900.00	0.35	143.16	3899.17	8.32	-0.25	19.66	0.10	19.66	90.73
4000.00	0.31	158.43	3999.17	8.89	-0.75	19.94	0.10	19.96	92.15
4100.00	0.21	173.16	4099.17	9.33	-1.18	20.06	0.12	20.10	93.37
4200.00	0.13	190.77	4199.16	9.60	-1.47	20.06	0.09	20.12	94.20
4300.00	0.15	176.59	4299.16	9.81	-1.72	20.05	0.04	20.12	94.89
4400.00	0.09	203.10	4399.16	9.99	-1.92	20.03	0.08	20.12	95.47
4500.00	0.08	204.20	4499.16	10.09	-2.06	19.97	0.01	20.07	95.88
4600.00	0.08	211.75	4599.16	10.17	-2.18	19.90	0.01	20.02	96.25
4700.00	0.04	212.39	4699.16	10.23	-2.27	19.85	0.04	19.98	96.52
4800.00	0.11	223.24	4799.16	10.29	-2.37	19.76	0.07	19.90	96.83



Scientific Drilling International Survey Report

Company: POGO
Field: Cedar Canyon
Site: Eddy County, NM
Well: Cypress 34 Federal #5H
Wellpath: VH - Job #32K0807677

Date: 09/07/2007 Time: 12:00:22 Page: 2
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well: (0.00N,0.00E,155.70Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

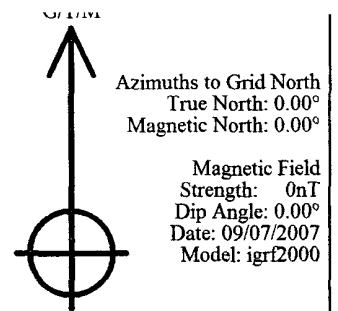
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	0.09	225.22	4899.16	10.35	-2.49	19.64	0.02	19.80	97.23
5000.00	0.16	298.10	4999.16	10.27	-2.48	19.46	0.16	19.62	97.27
5100.00	0.24	233.75	5099.16	10.20	-2.54	19.17	0.22	19.34	97.55
5200.00	0.41	279.92	5199.16	10.04	-2.60	18.65	0.30	18.83	97.94
5300.00	0.52	258.44	5299.16	9.74	-2.63	17.85	0.20	18.05	98.38
5400.00	0.51	250.87	5399.15	9.60	-2.87	16.99	0.07	17.23	99.58
5500.00	0.56	253.28	5499.15	9.50	-3.15	16.10	0.05	16.40	101.09
5600.00	0.47	243.12	5599.15	9.45	-3.48	15.26	0.13	15.66	102.84
5700.00	0.50	233.97	5699.14	9.56	-3.92	14.55	0.08	15.07	105.09
5800.00	0.52	225.50	5799.14	9.81	-4.50	13.87	0.08	14.58	107.96
5900.00	0.46	231.95	5899.13	10.06	-5.06	13.23	0.08	14.17	110.94
6000.00	0.59	229.75	5999.13	10.29	-5.64	12.52	0.13	13.73	114.26
6100.00	0.74	225.96	6099.12	10.65	-6.42	11.66	0.16	13.32	118.85
6200.00	0.79	213.24	6199.11	11.24	-7.45	10.82	0.18	13.14	124.54
6300.00	0.88	199.64	6299.10	12.17	-8.75	10.19	0.22	13.43	130.66
6400.00	0.94	189.77	6399.09	13.40	-10.28	9.79	0.17	14.20	136.41
6500.00	0.97	187.83	6499.08	14.79	-11.93	9.53	0.04	15.27	141.37
6600.00	1.13	175.24	6599.06	16.44	-13.75	9.50	0.28	16.71	145.36
6700.00	0.88	171.58	6699.05	18.11	-15.49	9.69	0.26	18.27	147.96
6800.00	1.23	167.83	6799.03	19.90	-17.30	10.03	0.36	20.00	149.89
6900.00	1.25	166.86	6899.01	22.02	-19.41	10.51	0.03	22.07	151.57
7000.00	1.16	168.56	6998.98	24.07	-21.47	10.96	0.10	24.10	152.96
7100.00	0.90	185.35	7098.97	25.74	-23.24	11.08	0.40	25.75	154.50
7200.00	1.02	173.32	7198.95	27.27	-24.91	11.11	0.23	27.27	155.95
7300.00	0.92	135.26	7298.94	28.87	-26.36	11.78	0.64	28.87	155.92
7361.00	0.48	170.35	7359.94	29.58	-26.96	12.17	0.98	29.58	155.70

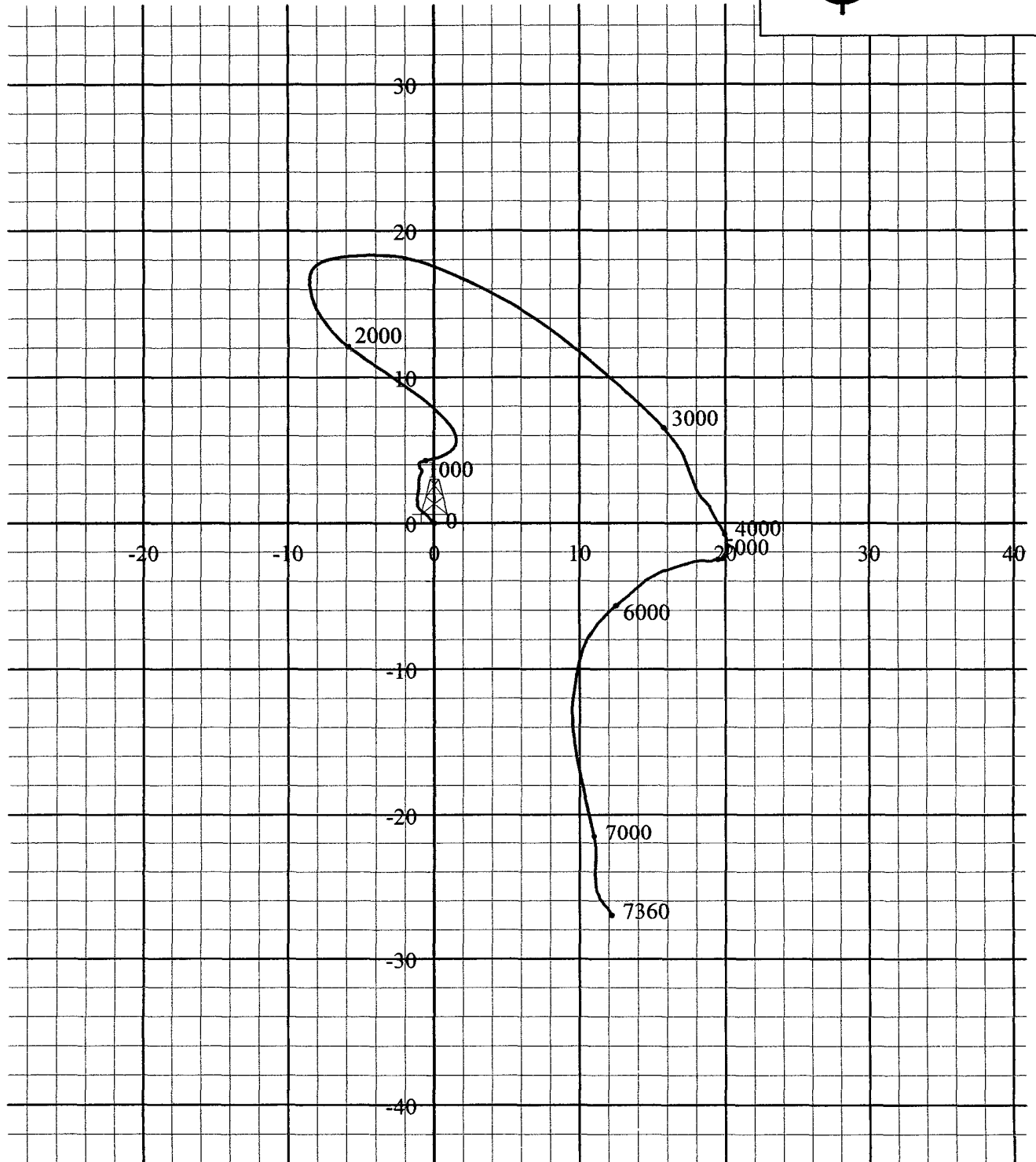


Scientific
Drilling

Field: Cedar Canyon
Site: Eddy County, NM
Well: Cypress 34 Federal #5H
Wellpath: VH - Job #32K0807677
Survey: 08/09/07



South(-)/North(+) [10ft/in]



West(-)/East(+) [10ft/in]

Pathfinder Energy

Survey Report

Company: Pogo Date: 08/29/2007 Time: 09:05:11 Page: 1
Field: Cypress 34 Federal #5H Co-ordinate(N/E) Reference: Site: Cypress 34 Federal #5H, Grid North
Site: Cypress 34 Federal #5H Vertical (TVD) Reference: SITE 3064.0
Well: Cypress 34 Federal #5H Section (VS) Reference: Well (0.00N,0.00E,78.59Azi)
Wellpath: OH Survey Calculation Method: Minimum Curvature Db: Sybase

Field: Cypress 34 Federal #5H		
Map System: US State Plane Coordinate System 1983	Map Zone:	New Mexico, Eastern Zone
Geo Datum: GRS 1980	Coordinate System:	Site Centre
Sys Datum: Mean Sea Level	Geomagnetic Model:	igrf2005

Site:		Cypress 34 Federal #5H			
Site Position:	Northing:	460641.29	ft	Latitude:	32 15 57.128 N
From: Map	Easting:	651884.22	ft	Longitude:	103 58 32.472 W
Position Uncertainty:	0.00	ft		North Reference:	Grid
Ground Level:	3048.00	ft		Grid Convergence:	0.19 deg

Well:	Cypress 34 Federal #5H				Slot Name:				
Well Position:	+N/-S	0.00 ft	Northing:	460641.29 ft	Latitude:	32	15	57.128	N
	+E/-W	0.00 ft	Easting :	651884.22 ft	Longitude:	103	58	32.472	W
Position Uncertainty:		0.00 ft							

Wellpath: OH		Drilled From:	Surface
Current Datum:	SITE	Tie-on Depth:	0.00 ft
Magnetic Data:	07/24/2007	Above System Datum:	Mean Sea Level
Field Strength:	49032 nT	Declination:	8.23 deg
Vertical Section: Depth From (TVD)		Mag Dip Angle:	60.26 deg
ft	+N-S	+E-W	Direction
	ft	ft	deg
0.00	0.00	0.00	78.59

Survey:	Pathfinder MWD	Start Date:	08/15/2007
Company:		Engineer:	
Tool:		Tied-to:	User Defined

Survey: Pathfinder MWD

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
7361.00	0.48	170.35	7359.94	-26.54	11.94	6.45	0.00	0.00	0.00	Tie-In To Gyro
7367.00	0.79	163.60	7365.94	-26.60	11.96	6.46	5.31	5.17	-112.50	
7397.00	0.79	159.55	7395.93	-27.00	12.09	6.51	0.19	0.00	-13.50	
7400.00	0.88	147.25	7398.93	-27.04	12.11	6.52	6.67	3.00	-410.00	KOP @ 7400' MD/ 7399' TVD
7428.00	2.81	112.36	7426.92	-27.48	12.86	7.17	7.67	6.89	-124.61	
7460.00	6.77	102.25	7458.80	-28.18	15.43	9.55	12.61	12.37	-31.59	
7491.00	11.08	99.08	7489.42	-29.03	20.16	14.01	13.99	13.90	-10.23	
7522.00	15.04	96.89	7519.61	-29.99	27.09	20.63	12.87	12.77	-7.06	
7553.00	18.38	95.66	7549.30	-30.95	35.95	29.12	10.83	10.77	-3.97	
7585.00	20.66	93.90	7579.45	-31.83	46.61	39.39	7.36	7.12	-5.50	
7615.00	23.65	93.28	7607.24	-32.54	57.90	50.32	10.00	9.97	-2.07	
7647.00	28.40	92.76	7635.98	-33.27	71.91	63.91	14.86	14.84	-1.62	
7677.00	34.03	92.14	7661.63	-33.93	87.44	79.00	18.80	18.77	-2.07	
7708.00	40.10	91.79	7686.36	-34.57	106.11	97.17	19.59	19.58	-1.13	
7739.00	44.14	86.34	7709.35	-34.19	126.87	117.60	17.57	13.03	-17.58	
7770.00	47.57	79.75	7730.95	-31.46	148.92	139.76	18.83	11.06	-21.26	
7802.00	51.09	75.71	7751.81	-26.28	172.62	164.01	14.58	11.00	-12.62	
7832.00	54.52	72.10	7769.95	-19.65	195.57	187.82	14.92	11.43	-12.03	
7863.00	58.12	69.11	7787.14	-11.07	219.89	213.35	14.11	11.61	-9.65	
7894.00	60.59	69.55	7802.94	-1.66	244.84	239.67	8.06	7.97	1.42	
7925.00	63.05	69.99	7817.57	7.79	270.48	266.67	8.03	7.94	1.42	
7956.00	65.25	70.52	7831.09	17.21	296.73	294.28	7.26	7.10	1.71	
7988.00	68.59	71.57	7843.63	26.77	324.57	323.45	10.87	10.44	3.28	
8018.00	70.96	72.81	7854.00	35.38	351.37	351.43	8.80	7.90	4.13	

Pathfinder Energy

Survey Report

Company: Pogo	Date: 08/29/2007	Time: 09:05:11	Page: 2
Field: Cypress 34 Federal #5H	Co-ordinate(NE) Reference: Site: Cypress 34 Federal #5H, Grid North		
Site: Cypress 34 Federal #5H	Vertical (TVD) Reference: SITE 3064.0		
Well: Cypress 34 Federal #5H	Section (VS) Reference: Well (0.00N, 0.00E, 78.59Azi)		
Wellpath: OH	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Pathfinder MWD

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
8050.00	73.25	75.00	7863.84	43.82	380.63	381.77	9.68	7.16	6.84	
8081.00	75.62	75.62	7872.16	51.39	409.51	411.59	7.88	7.65	2.00	
8113.00	78.26	75.97	7879.39	59.04	439.73	442.72	8.32	8.25	1.09	
8144.00	80.28	77.02	7885.16	66.15	469.34	473.15	7.32	6.52	3.39	
8175.00	81.78	78.17	7889.99	72.72	499.25	503.77	6.07	4.84	3.71	
8182.66	82.12	78.44	7891.06	74.26	506.68	511.35	5.65	4.40	3.57	EOC @ 8183' MD, 7900' TVD
8207.00	83.19	79.31	7894.18	78.92	530.36	535.49	5.65	4.41	3.56	
8237.00	86.17	78.96	7896.96	84.55	559.69	565.36	10.00	9.93	-1.17	
8268.00	89.60	79.22	7898.10	90.41	590.11	596.33	11.10	11.06	0.84	
8299.00	91.54	80.10	7897.79	95.97	620.60	627.32	6.87	6.26	2.84	
8331.00	91.19	79.40	7897.03	101.67	652.08	659.31	2.45	-1.09	-2.19	
8362.00	89.69	78.61	7896.79	107.58	682.51	690.30	5.47	-4.84	-2.55	
8423.00	89.25	77.64	7897.36	120.13	742.20	751.30	1.75	-0.72	-1.59	
8516.00	88.81	77.29	7898.93	140.31	832.97	844.27	0.60	-0.47	-0.38	
8609.00	88.46	77.82	7901.15	160.35	923.76	937.22	0.68	-0.38	0.57	
8702.00	87.58	76.58	7904.36	180.94	1014.39	1030.14	1.63	-0.95	-1.33	
8796.00	89.25	77.20	7906.96	202.25	1105.90	1124.06	1.89	1.78	0.66	
8890.00	89.34	77.38	7908.12	222.93	1197.59	1218.03	0.21	0.10	0.19	
8984.00	88.99	77.02	7909.49	243.75	1289.25	1311.99	0.53	-0.37	-0.38	
9077.00	89.16	77.29	7910.99	264.43	1379.91	1404.95	0.34	0.18	0.29	
9170.00	89.43	77.73	7912.13	284.54	1470.70	1497.92	0.56	0.29	0.47	
9262.00	89.34	78.96	7913.12	303.12	1560.80	1589.92	1.34	-0.10	1.34	
9354.00	89.16	78.34	7914.32	321.23	1650.99	1681.91	0.70	-0.20	-0.67	
9447.00	89.60	77.73	7915.33	340.51	1741.96	1774.90	0.81	0.47	-0.66	
9540.00	90.48	76.23	7915.27	361.46	1832.57	1867.86	1.87	0.95	-1.61	
9633.00	88.99	77.38	7915.70	382.68	1923.11	1960.81	2.02	-1.60	1.24	
9727.00	89.34	76.67	7917.07	403.79	2014.70	2054.76	0.84	0.37	-0.76	
9819.00	90.48	78.43	7917.21	423.62	2104.53	2146.74	2.28	1.24	1.91	
9914.00	91.28	78.69	7915.75	442.46	2197.63	2241.73	0.89	0.84	0.27	
10007.00	90.40	78.69	7914.39	460.70	2288.81	2334.72	0.95	-0.95	0.00	
10100.00	90.75	79.31	7913.45	478.44	2380.10	2427.71	0.77	0.38	0.67	
10193.00	90.48	78.78	7912.46	496.11	2471.40	2520.70	0.64	-0.29	-0.57	
10285.00	89.34	78.43	7912.60	514.29	2561.58	2612.70	1.30	-1.24	-0.38	
10377.00	88.29	77.64	7914.50	533.36	2651.56	2704.67	1.43	-1.14	-0.86	
10470.00	88.72	77.11	7916.93	553.68	2742.28	2797.62	0.73	0.46	-0.57	
10562.00	88.90	77.11	7918.84	574.20	2831.94	2889.57	0.20	0.20	0.00	
10655.00	89.16	77.02	7920.41	595.01	2922.57	2982.52	0.30	0.28	-0.10	
10748.00	89.08	76.94	7921.84	615.96	3013.17	3075.47	0.12	-0.09	-0.09	
10810.00	88.99	76.50	7922.89	630.20	3073.50	3137.43	0.72	-0.15	-0.71	Final MWD Survey @ 10810'
10875.00	88.99	76.50	7924.03	645.37	3136.70	3202.38	0.00	0.00	0.00	Proj. to Bit @ 10875' MD

Targets

Name	Description	TVD	+N/-S	+E/-W	Map Northing	Map Easting	Latitude	Longitude
Dip	Dir	ft	ft	ft	ft	ft	Deg Min Sec	Deg Min Sec
PBHL		7925.00	660.96	3275.07	461302.26	655159.29	32 16 3.559 N	103 57 54.301 W

Annotation

MD ft	TVD ft	
7361.00	7359.94	Tie-In To Gyro
7400.00	7398.93	KOP @ 7400' MD/ 7399' TVD
8182.66	7891.06	EOC @ 8183' MD, 7900' TVD
10810.00	7922.89	Final MWD Survey @ 10810' MD

Pathfinder Energy

Survey Report

Company: Pogo	Date: 08/29/2007	Time: 09:05:11	Page: 3
Field: Cypress 34 Federal #5H	Co-ordinate(NE) Reference: Site: Cypress 34 Federal #5H, Grid North		
Site: Cypress 34 Federal #5H	Vertical (TVD) Reference: SITE 3064.0		
Well: Cypress 34 Federal #5H	Section (VS) Reference: Well (0.00N,0.00E,78.59Azi)		
Wellpath: OH	Survey Calculation Method: Minimum Curvature		Db: Sybase

Annotation

MD	TVD	
ft	ft	
10875.00	7924.03	Proj to Bit @ 10875' MD



**POGO PRODUCING
COMPANY**

COMPANY DETAILS

Pogo

Calculation Method Minimum Curvature
Error System Systematic Ellipse
Scan Method Closest Approach 3D
Error Surface Elliptical Conic
Warning Method Error Ratio

PATHFINDER

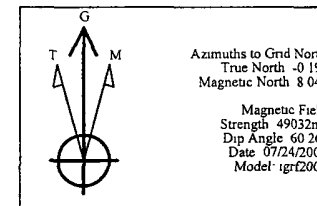
Field: Cypress 34 Federal #5H
Site: Cypress 34 Federal #5H
Well: Cypress 34 Federal #5H
Wellpath: OH
Survey: Pathfinder MWD

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Cypress 34 Federal #5H	0 00	0 00	460641 29	651884 22	32°15'57 128N	103°58'32 472W	N/A

Survey Pathfinder MWD (Cypress 34 Federal #5H/OH)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
51	9819 00	90 48	78 43	7917 21	423 62	2104 53	2 28	57 07	2146 74
52	9914 00	91 28	78 69	7915 75	442 46	2197 63	0 89	18 00	2241 73
53	10007 00	90 40	78 69	7914 39	460 70	2288 81	0 95	180 00	2334 72
54	10100 00	90 75	79 31	7913 45	478 44	2380 10	0 77	60 55	2427 71
55	10193 00	90 48	78 78	7912 46	496 11	2471 40	0 64	-116 99	2520 70
56	10285 00	89 34	78 43	7912 60	514 29	2561 58	1 30	-162 93	2612 70
57	10377 00	88 29	77 64	7914 50	533 36	2651 56	1 43	-143 06	2704 67
58	10470 00	88 72	77 11	7916 93	553 68	2742 28	0 73	-50 94	2797 62
59	10562 00	88 90	77 11	7918 84	574 20	2831 94	0 20	0 00	2889 57
60	10655 00	89 16	77 02	7920 41	595 01	2922 57	0 30	-19 09	2982 52
61	10748 00	89 08	76 94	7921 84	615 96	3013 17	0 12	-135 00	3075 47
62	10810 00	88 99	76 50	7922 89	630 20	3073 50	0 72	-101 57	3137 43
63	10875 00	88 99	76 50	7924 03	645 37	3136 70	0 00	180 00	3202 38



Azimuths to Grid North
True North -0 19°
Magnetic North 8 04°
Magnetic Field
Strength 49032nT
Dip Angle 60 26°
Date 07/24/2007
Model igrf2005

SITE DETAILS

Cypress 34 Federal #5H
Site Centre Northing 460641 29
Easting 651884 22
Ground Level 3048 00
Positional Uncertainty 0 00
Convergence 0 19

FIELD DETAILS

Cypress 34 Federal #5H
Geodetic System US State Plane Coordinate System 1983
Ellipsoid GRS 1980
Zone New Mexico, Eastern Zone
Magnetic Model igrf2005
System Datum Mean Sea Level
Local North Grid North

ANNOTATIONS

No	TVD	MD	Annotation
1	7359 94	7361 00	Tie-In To Gyro
2	7398 93	7400 00	KOP @ 7400' MD/ 7399' TVD
3	7891 06	8182 66	EOC @ 8183' MD, 7900' TVD
4	7922 89	10810 00	Final MWD Survey @ 10810' MD
5	7924 03	10875 00	Proj to Bit @ 10875' MD

LEGEND

— Cypress 34 Federal #5H, OH, Plan #2 8-13-07
— OH
— Pathfinder MWD

