



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO 1004-0135
Expires July 31, 2010

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.

5 Lease Serial No
NMNM22080

6 If Indian, Allottee or Tribe Name

7 If Unit or CA/Agreement, Name and/or No

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

8 Well Name and No
BARCLAY FEDERAL 4

9 API Well No
30-015-29684-00-S1

10 Field and Pool, or Exploratory
LIVINGSTON RIDGE

11 County or Parish, and State
EDDY COUNTY, NM

1 Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2 Name of Operator
FOREST OIL CORPORATION

Contact CINDY A BUSH
E-Mail cabush@forestoil.com

3a Address
707 17TH STREET, STE 3600
DENVER, CO 80202

3b Phone No (include area code)
Ph 303-812-1554
Fx 303-864-6105

4 Location of Well (Footage Sec, T, R, M, or Survey Description)
Sec 12 T23S R31E NESE 1980FSL 660FEL

SEP 19 2007
OCD-ARTESIA

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Alter Casing
	<input type="checkbox"/> Fracture Treat
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Change Plans
	<input type="checkbox"/> Plug and Abandon
	<input type="checkbox"/> Convert to Injection
	<input type="checkbox"/> Plug Back
	<input type="checkbox"/> Production (Start/Resume)
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Water Disposal
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Well Integrity
	<input checked="" type="checkbox"/> Other Workover Operatic

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.)

Rod Repair

7-10-07 Spot rig
7-11-07 RU PU unhung well head, lay down P R POH 13 rods down pin break on 1 2 F G RU fish tool try to fish not luck, COH ND rod hook Put bells & tbg elevator, swab down ND WH unset tac, poh 18 jts to pin break, unset pmp POH 124-1 2 F G rods & 118-1" rods, 10 K bars, 1 5 4"x1" sub shear tool, 4' x 1" sub rod guide sub, pmp 2-1/2 x 1-3/4 x 28', 12' x 1-1/4 GA, RBIH 18 jts set TAC NU WH change bells elevator NU rod tongs, pick up new pmp & subs & 10-K bars
7-12-07 Open well RBIH rods 118-1"-124-1 2 F G, 1 2 x 18'-9' x 1 2 sub, 2 subs 3' x 1 21 P R., replace 1 2 F G rod. and 26 -K shear tool hang well RU hot oiler load tbg w/32 bbls wtr press

14 I hereby certify that the foregoing is true and correct	
Electronic Submission #56234 verified by the BLM Well Information System For FOREST OIL CORPORATION, sent to the Carlsbad Committed to AFMSS for processing by ALEXIS SWOBODA on 09/06/2007 (07AS1422SE)	
Name (Printed/Typed) CINDY A BUSH	Title SR REGULATORY TECH
Signature (Electronic Submission)	Date 09/04/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By	DAVID R GLASS Title PETROLEUM ENGINEER	Date 09/14/2007
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		Office Carlsbad

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

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #56234 that would not fit on the form

32. Additional remarks, continued

500# held good, RD hot oiler, RD PU clean location

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		5 Lease Serial No MM 108950	
b Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff Resvr, Other		6 If Indian, Allottee or Tribe Name	
2 Name of Operator BOG Resources Inc.		7 Unit or CA Agreement Name and No	
3 Address P.O. Box 2267 Midland, Texas 79702		8 Lease Name and Well No Colorado A 22 Federal 2H	
3a Phone No (include area code) 432 686 3689		9 API Well No 30-015-34711	
4 Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 1949' FNL & 586' FEL, U/L H At top prod interval reported below At total depth 1872' FNL & 730' FWL, U/L E		10 Field and Pool, or Exploratory Cottonwood Creek; WC, West	
14 Date Spudded 8/6/07		11 Sec, T, R, M, or Block and Survey or Area Sec 22, T16S, R24E	
15 Date T D Reached 8/16/07		12 County or Parish Eddy	
16 Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod 8/31/07		13 State NM	
18 Total Depth MD 8370 TVD 4454		17 Elevations (DF, RKB, RT, GL)* 3631' GL	
19 Plug Back T D MD TVD		20 Depth Bridge Plug Set MD TVD	

21 Type Electric & Other Mechanical Logs Run (Submit copy of each)		22 Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit copy)	
--	--	--	--

23 Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt (#ft)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No of Sks & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
12 1/4	8 5/8	32		942		1045		surface	
7 7/8	5 1/2	17		8350		1275		surface	

24 Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
2 3/8	4862								

25 Producing Intervals				26 Perforation Record			
Formation	Top	Bottom	Perforation Interval	Size	No Holes	Perf Status	
A) Wolfcamp	4540		4625 - 8264	0.42"	128	producing	
B)							
C)							
D)							

27 Acid, Fracture, Treatment, Cement Squeeze, Etc	
Depth Interval	Amount and Type of Material
4625 - 8264	Frac w/ 12096 gals 15% HCL acid, 118148 gals XL gel, 277584 lbs 100 mesh sand, 310567 lbs 30/50 sand, 130949 lbs 20/40 sand, 960288 gals slick water

28 Production - Interval A									
Date First Produced 8/31/07	Test Date 9/11/07	Hours Tested 24	Test Production →	Oil BBL 0	Gas MCF 1984	Water BBL 79	Oil Gravity Corr API	Gas Gravity	Production Method Flowing
Choke Size Open	Tbg Press Flwg SI 290	Csg Press	24 Hr →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status PGW	ACCEPTED FOR RECORD SEP 14 2007 JERRY FANT PETROLEUM GEOLOGIST
28a Production-Interval B									
Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
Choke Size	Flow Press SI	Csg Press	24 Hr →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

28c Production-Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
Choke Size	Flow Press SI	Csg Press	24 Hr →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

29 Disposition of Gas (Sold, used for fuel, vented, etc)

Sold

30 Summary of Porous Zones (Include Aquifers)

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31 Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc	Name	Top
					Meas Depth
				Clear Fork	2300'
				Tubb	2950'
				Abo Shale	3620'
				Wolfcamp ls	4640'

32. Additional remarks (include plugging procedure):

33 Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other

34 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Stan WagnerTitle Regulatory Analyst

Signature


Date 9/12/07

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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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1 Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2 Name of Operator

EOG Resources Inc.

3a Address

P.O. Box 2267 Midland, Texas 79702

3b Phone No (include area code)

432.686.3689

4 Location of Well (Footage, Sec, T, R, M, or Survey Description)

**1949' FNL & 586' FEL, U/L H
Sec 22, T16S, R24E**

5 Lease Serial No

MM 108950

6 If Indian, Allottee or Tribe Name

7 If Unit or CA/Agreement, Name and/or No

8 Well Name and No

Colorado A 22 Fed 2H

9 API Well No

30-015-34711

10 Field and Pool, or Exploratory Area

Cottonwood Creek; WC, West

11 County or Parish, State

Eddy**NM**

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

TYPE OF SUBMISSION

- ☐ Notice of Intent
- ☒ Subsequent Report
- ☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other <u>Spud & casing test</u> |
| <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> 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 final site is ready for final inspection.)

8/16/07 TD @ 8370'**Ran 190 jts 5 1/2", 17 #, N-80 casing set @ 8350'.****8/17/07 Cemented w/ 530 sx 50/50 POZ C, 11.9 ppg, 2.34 yield; 745 sx 50/50 POZ C, 14.2 ppg, 1.37 yield.
Circulated 150 sx to surface. Released rig.****8/28/07 MIRU for completion.****Step rate tested casing to 7000 psi for 30 min. Test good.****Perforate from 7545' to 8264', 0.42", 32 holes.****Frac w/ 72 bbls 15% HCL acid, 529 bbls XL gel, 67000 lbs 100 mesh sand, 75000 lbs 30/50 sand, 30000 lbs 20/40 sand, 5827 bbls load water.****Perforated from 6565' to 7260', 0.42", 32 holes.****Frac w/ 72 bbls 15% HCL acid, 616 bbls XL gel, 67000 lbs 100 mesh sand, 75000 lbs 30/50 sand, 30000 lbs 20/40 sand, 6062 bbls load water.****8/29/07 Perforated from 5550' to 6320', 0.42", 32 holes.****Frac w/ 72 bbls 15% HCL acid, 663 bbls XL gel, 67000 lbs 100 mesh sand, 75000 lbs 30/50 sand, 30000 lbs 20/40 sand, 6007 bbls load water.****Perforated from 4625' to 5340', 0.42", 32 holes.**14 I hereby certify that the foregoing is true and correct
Name (Printed/Typed)**Stan Wagner**

Title

Regulatory Analyst

Signature

Date **9/11/07****THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

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Office

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Colorado A 22 Fed 2H

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Cottonwood Creek; WC, West

11 County or Parish, State

Eddy

NM

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☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|---|
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| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other <u>Spud & casing test</u> |
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| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

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8/29/07 Frac w/ 72 bbls 15% HCL acid, 1005 bbls XL gel, 76584 lbs 100 mesh sand, 85567 lbs 30/50 sand, 40949 lbs 20/40 sand, 6545 bbls load water.

Flow back.

8/30/07 RIH w/ 2 3/8" production tubing set @ 4862'.

Flow back.

8/31/07 Turned to sales.

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

Stan Wagner

Title

Regulatory Analyst

Signature

Date **9/11/07**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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DIRECTIONAL SURVEY REPORT

EOG RESOURCES

COLORADO A22 FED COM #2H

EDDY COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

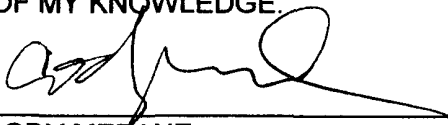
DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) WESLEY TEETER
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 8/10/07 TO 8/16/07
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

EOG RESOURCES
COLORADO A22 FED COM #2H
EDDY COUNTY, NM
RIG: MCVAY #8

9. SURVEY CERTIFIED FROM: 4055 TO 8293 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 3963.9 FEET ON A BEARING OF 271.10 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 8370 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



CODY MEBANE
M/LWD SERVICE COORDINATOR

PATHFINDER
ENERGY SERVICES
DIRECTIONAL SURVEY INFORMATION

FAXED AUG 17 2007

APPROVED AUG 20 2007

Prepared By: WESLEY TEETER CODY MEBANE

Name of Client: EOG RESOURCES
COLORADO A22 FED COM #2H
EDDY CO NM
Attention: _____

☐ Directional Only Job OR ☒ Logging Job

Name(s) of Persons Performing Surveys:

A) WESLEY TEETER D) _____
B) CHUCK HARPER E) _____
C) HAFA DONARUMMA F) _____

Positions of Said Persons: Surveyors / Field Engineers: Other _____

Date(s) Survey was Performed: From 8/10/2007 To 8/16/2007

Type of Survey Performed: (Specify if other than MWD) _____

IDENTIFICATION OF WELL:

Client:	<u>EOG RESOURCES</u>	Rig Name:	<u>MC VAY #8</u>
Well No.:	<u>COLORADO A22 FED COM #2H</u>	API No.:	<u>30-015-34711</u>
Location:	<u>EDDY CO. NM</u>	Job No.:	<u>101006652 WT-WT</u>
State:	<u>NM</u>		

TEXAS RAILROAD COMMISSION INFORMATION:

Field: COTTONWOOD CREEK, WOLFCAMP WEST

Abstract No.: _____
Well Plat Survey Co.: _____

Surveys Performed From 4055 Feet TO 8293 Feet

MMS / ASCII / LAS Diskette Filename: _____

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOW THE WELL TO BE DISPLACED AT 3963.9
FEET ON A BEARING OF 271.10 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT
A PROJECTED DEPTH OF 8370 FEET, ARE TRUE AND
CORRECT TO THE BEST OF MY KNOWLEDGE.

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 08/09/2007
Date Completed: 08/16/2007

EOG RESOURCES, INC.
COLORADO A22 FED COM #2H
EDDY COUNTY, NM
Rig:McVAY 8
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers:W.TEETER
C.HARPER
H.DONARUMMA

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.54.36.0576 N LON:104.34.10.0524 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 427534.3449 Y: 694856.6475
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.67° EAST TO GRID
Vertical Section Plane: 270.79
Survey Vert. Reference: 19.00' Kelly Bushing To Ground
Altitude:3631.00' Ground To MSL

Measured Depth	8370.00	(feet)
Inclination	91.01	(deg)
Azimuth	269.92	(deg)
True Vertical Depth	4454.64	(feet)
Vertical Section	3963.84	(feet)
Survey X cord	423571.31	(feet)
Survey Y cord	694932.52	(feet)
Survey Lat	32.91019950 N	(deg)
Survey Lon	104.58237282 W	(deg)
Rectangular Corr. N/S	76.08 N	(feet)
Rectangular Corr. E/W	3963.17 W	(feet)
Closure Distance	3963.90	(feet)
Direction of Closure	271.10	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

EOG RESOURCES, INC.

COLORADO A22 FED COM #2H

EDDY COUNTY, NM

Rig:McVAY 8

PathFinder Office Supervisor: CODY MEBANE

PathFinder Field Engineers: W.TEETER

C.HARPER

H.DONARUMMA

Survey Calculations by RX5 V5.11E using Minimum Curvature

Survey Horiz. Reference:WELLHEAD

Ref Coordinates: LAT:32.54.36.0576 N LON:104.34.10.0524 W

Reference:NAD27 new mexico east Transverse Mercator

Ref GRID Coord: X: 427534.3449 Y: 694856.6475

North Aligned To:GRID NORTH

Total Magnetic Correction: 8.67° EAST TO GRID

Vertical Section Plane: 270.79

Survey Vert. Reference: 19.00' Kelly Bushing To Ground

Altitude:3631.00' Ground To MSL

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Retangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIE IN TO SCIENTIFIC GYRO @ 4081' MD.										
4000.00	2.06	41.76	3999.34	0.00	6.42	37.28 N	5.91 W	37.75@	350.99	0.00
THE FOLLOWING ARE PATHFINDER SURVEYS.										
4055.00	2.29	59.91	4054.30	55.00	4.83	38.57 N	4.30 W	38.81@	353.64	1.31
4087.00	1.76	5.42	4086.28	32.00	4.24	39.38 N	3.70 W	39.55@	354.63	5.98
4118.00	4.04	312.77	4117.25	31.00	5.02	40.59 N	4.46 W	40.84@	353.73	10.60
4150.00	7.39	300.29	4149.08	32.00	7.65	42.40 N	7.06 W	42.98@	350.54	11.11
4182.00	11.08	296.51	4180.66	32.00	12.21	44.81 N	11.59 W	46.28@	345.49	11.68
4214.00	14.42	297.39	4211.87	32.00	18.55	48.02 N	17.88 W	51.24@	339.57	10.46
4245.00	17.76	298.71	4241.65	31.00	26.18	52.06 N	25.46 W	57.96@	333.94	10.84
4278.00	21.02	298.80	4272.78	33.00	35.85	57.33 N	35.06 W	67.21@	328.55	9.88
4310.00	24.27	297.65	4302.31	32.00	46.79	63.15 N	45.92 W	78.08@	323.98	10.25
4342.00	27.44	295.54	4331.10	32.00	59.35	69.39 N	58.40 W	90.69@	319.91	10.31
4373.00	30.78	296.38	4358.18	31.00	73.00	75.99 N	71.96 W	104.65@	316.56	10.85
4405.00	34.73	297.89	4385.09	32.00	88.50	83.90 N	87.36 W	121.12@	313.84	12.60
4436.00	38.87	299.28	4409.90	31.00	104.92	92.79 N	103.65 W	139.12@	311.83	13.62
4468.00	42.91	300.56	4434.09	32.00	123.21	103.24 N	121.80 W	159.67@	310.29	12.89
4500.00	47.31	301.87	4456.67	32.00	142.75	115.00 N	141.18 W	182.09@	309.16	14.05
4532.00	50.74	299.80	4477.65	32.00	163.66	127.37 N	161.92 W	206.01@	308.19	11.78
4564.00	55.31	295.68	4496.90	32.00	186.45	139.23 N	184.55 W	231.18@	307.03	17.59
4596.00	57.77	289.14	4514.55	32.00	211.25	149.38 N	209.21 W	257.07@	305.53	18.70
4628.00	60.41	283.08	4531.00	32.00	237.72	156.98 N	235.57 W	283.08@	303.68	18.22
4659.00	64.37	278.60	4545.37	31.00	264.75	162.12 N	262.54 W	308.56@	301.70	18.08
4691.00	69.38	275.87	4557.94	32.00	293.98	165.81 N	291.73 W	335.56@	299.61	17.51

PathFinder Energy Services, Inc.

Survey Report

EOG RESOURCES, INC.
 COLORADO A22 FED COM #2H
 EDDY COUNTY, NM
 RIG:McVAY 8

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Retangular Offsets (ft) (ft)		Closure Dist (ft)	Dir (deg)	DLS (dg/100ft)
4720.00	73.95	273.35	4567.06	29.00	321.44	168.02 N	319.16 W	360.68@	297.76	17.79
4754.00	80.46	270.88	4574.59	34.00	354.57	169.23 N	352.27 W	390.81@	295.66	20.41
4786.00	85.47	270.72	4578.50	32.00	386.32	169.67 N	384.01 W	419.83@	293.84	15.66
4818.00	89.43	270.38	4579.93	32.00	418.28	169.98 N	415.97 W	449.36@	292.23	12.42
4850.00	93.39	270.33	4579.14	32.00	450.26	170.18 N	447.96 W	479.19@	290.80	12.38
4880.00	94.62	269.96	4577.04	30.00	480.19	170.25 N	477.88 W	507.31@	289.61	4.28
4975.00	93.83	269.94	4570.05	95.00	574.92	170.17 N	572.62 W	597.37@	286.55	0.83
5071.00	92.77	269.54	4564.52	96.00	670.74	169.73 N	668.46 W	689.68@	284.25	1.18
5167.00	93.39	269.83	4559.36	96.00	766.58	169.21 N	764.32 W	782.83@	282.48	0.71
5262.00	89.25	267.50	4557.17	95.00	861.46	166.99 N	859.24 W	875.32@	281.00	5.00
5357.00	92.86	268.59	4555.42	95.00	956.32	163.75 N	954.16 W	968.11@	279.74	3.97
5453.00	91.54	267.77	4551.74	96.00	1052.15	160.71 N	1050.03 W	1062.26@	278.70	1.62
5548.00	92.51	267.09	4548.38	95.00	1146.93	156.45 N	1144.88 W	1155.52@	277.78	1.25
5643.00	93.21	266.93	4543.64	95.00	1241.60	151.50 N	1239.63 W	1248.85@	276.97	0.76
5742.00	90.84	264.88	4540.14	99.00	1340.17	144.43 N	1338.30 W	1346.07@	276.16	3.16
5837.00	93.12	266.36	4536.86	95.00	1434.71	137.18 N	1432.96 W	1439.51@	275.47	2.86
5933.00	92.24	265.31	4532.37	96.00	1530.25	130.22 N	1528.60 W	1534.14@	274.87	1.43
6028.00	93.91	267.07	4527.28	95.00	1624.80	123.91 N	1623.24 W	1627.97@	274.37	2.55
6124.00	92.77	268.40	4521.68	96.00	1720.50	120.13 N	1719.00 W	1723.20@	274.00	1.82
6220.00	92.07	268.60	4517.63	96.00	1816.33	117.62 N	1814.88 W	1818.69@	273.71	0.76
6315.00	91.89	268.60	4514.35	95.00	1911.21	115.30 N	1909.80 W	1913.28@	273.45	0.19
6411.00	91.63	268.79	4511.40	96.00	2007.10	113.11 N	2005.73 W	2008.92@	273.23	0.34
6507.00	91.54	268.84	4508.74	96.00	2103.00	111.13 N	2101.67 W	2104.61@	273.03	0.11
6602.00	91.89	268.99	4505.90	95.00	2197.91	109.33 N	2196.61 W	2199.33@	272.85	0.40
6697.00	90.92	268.45	4503.57	95.00	2292.82	107.21 N	2291.56 W	2294.06@	272.68	1.17
6793.00	91.19	268.62	4501.80	96.00	2388.73	104.75 N	2387.51 W	2389.81@	272.51	0.33
6889.00	92.24	268.41	4498.93	96.00	2484.61	102.27 N	2483.43 W	2485.54@	272.36	1.12

PathFinder Energy Services, Inc.

Survey Report

EOG RESOURCES, INC.
COLORADO A22 FED COM #2H
EDDY COUNTY, NM
RIG:McVAY 8

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Retangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
7081.00	91.10	267.61	4493.33	192.00	2676.30	95.60 N	2675.23 W	2676.94@	272.05	0.72
7177.00	91.71	267.48	4490.98	96.00	2772.11	91.49 N	2771.11 W	2772.62@	271.89	0.65
7274.00	92.33	268.61	4487.56	97.00	2868.94	88.18 N	2868.00 W	2869.35@	271.76	1.33
7370.00	91.80	268.06	4484.10	96.00	2964.79	85.40 N	2963.89 W	2965.12@	271.65	0.79
7466.00	92.95	269.25	4480.12	96.00	3060.63	83.15 N	3059.78 W	3060.91@	271.56	1.72
7562.00	91.10	269.10	4476.73	96.00	3156.53	81.76 N	3155.71 W	3156.76@	271.48	1.93
7658.00	92.33	270.49	4473.86	96.00	3252.47	81.42 N	3251.66 W	3252.68@	271.43	1.93
7755.00	89.96	268.01	4471.92	97.00	3349.40	80.15 N	3348.61 W	3349.57@	271.37	3.54
7849.00	93.47	269.68	4469.11	94.00	3443.29	78.26 N	3442.54 W	3443.43@	271.30	4.14
7946.00	93.39	270.17	4463.30	97.00	3540.10	78.13 N	3539.36 W	3540.22@	271.26	0.51
8041.00	91.19	269.11	4459.51	95.00	3635.00	77.53 N	3634.28 W	3635.10@	271.22	2.57
8136.00	88.99	268.75	4459.36	95.00	3729.94	75.76 N	3729.25 W	3730.02@	271.16	2.35
8232.00	92.68	271.11	4457.96	96.00	3825.90	75.64 N	3825.22 W	3825.97@	271.13	4.56
8293.00	91.01	269.92	4456.00	61.00	3886.86	76.19 N	3886.18 W	3886.93@	271.12	3.36
STRAIGHT LINE PROJECTION TO BIT @ 8370' MD.										
8370.00	91.01	269.92	4454.64	77.00	3963.84	76.08 N	3963.17 W	3963.90@	271.10	0.00

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

EOG RESOURCES, INC.
COLORADO A 22 FEDERAL # 2H
EDDY Co, NEW MEXICO
Rig:McVAY 8

Thu Aug 02 15:09:43 2007

Coordinates

Latitude: 32.910016 N (32 deg. 54 min. 36.0558 sec.)
Longitude: 104.569459 W (-104 deg. 34 min. 10.0506 sec.)
Elevation: 3631.00 feet.
Calculation Date: Aug/02/2007

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.7469 degrees
Total Magnetic Field: 0.49321 gauss
Magnetic Declination: 8.542228 degrees
Horizontal Intensity: 0.241014 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.542228 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 427534.4980 feet
Y: 694856.4653 feet
True to Grid: (convergence) 0.128292 degrees
Magnetic to Grid: 8.670520 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 8.670520 Degr.

PathFinder Energy Services, Inc.

Electro Magnetic Error Report

Thu Aug 02 15:11:31 2007

Job #: 101006652 WT-WT

Customer Name: EOG RESOURCES, INC.

Well Name: COLORADO A 22 FEDERAL # 2H

M/LWD Run #: 0

Electro Magnetic Units Below Magnetometers:	3000.00
Electro Magnetic Units Above Magnetometers:	3500.00
Distance Above Magnetometers:	63.70
Incline:	90.00
Direction:	89.53
Horizontal Intensity:	0.241
Maximum Error:	0.750
Distance Below Magnetometers:	38.300

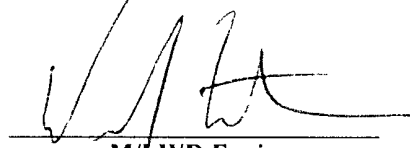


R-TOOL: PULSER
TCM
UGS
BMS
HDAS

Recommended Distance Below Magnetometers:	38.0842
Recommended Error:	0.750
Actual Error:	0.744

RAW DATA FOR BACK UP STATIC SEQUENCE MANDATORY

This assembly requires 60.00 feet of additional non-mag spacing above the M/LWD monel and 11.00 feet of additional non-mag spacing below the PathFinder M/LWD orienting sub or M/LWD float sub to yield an error of .75 degree(s) or less in direction.

5/9/07
Date


M/LWD Engineer

Directional Driller

Company Representative

The above calculations are based on empirical data. The estimated error is based on average values of electromagnetic units. This estimated error is to be used only as a guide. PathFinder uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed. PathFinder does not warrant the accuracy of such information or interpretations. PathFinder will not, except in the case of gross or willful negligence on its part, be liable or responsible for loss, cost, damages or expenses incurred or sustained by anyone as a result of any interpretations.

CLIENT INFORMATION

[illegible]

HKC KOFF DREI 1981 GEDRUCKT 6800-10

1912-1913 1914-1915

1234567891011121314151617181920212223242526272829303132333435363738394041424344454647484950515253545556575859606162636465666768697071727374757677787980818283848586878889909192939495969798991001011021031041051061071081091101111121131141151161171181191201211221231241251261271281291301311321331341351361371381391401411421431441451461471481491501511521531541551561571581591601611621631641651661671681691701711721731741751761771781791801811821831841851861871881891901911921931941951961971981992002012022032042052062072082092102112122132142152162172182192202212222232242252262272282292302312322332342352362372382392402412422432442452462472482492502512522532542552562572582592602612622632642652662672682692702712722732742752762772782792802812822832842852862872882892902912922932942952962972982993003013023033043053063073083093103113123133143153163173183193203213223233243253263273283293303313323333343353363373383393403413423433443453463473483493503513523533543553563573583593603613623633643653663673683693703713723733743753763773783793803813823833843853863873883893903913923933943953963973983994004014024034044054064074084094104114124134144154164174184194204214224234244254264274284294304314324334344354364374384394404414424434444454464474484494504514524534544554564574584594604614624634644654664674684694704714724734744754764774784794804814824834844854864874884894904914924934944954964974984995005015025035045055065075085095105115125135145155165175185195205215225235245255265275285295305315325335345355365375385395405415425435445455465475485495505515525535545555565575585595605615625635645655665675685695705715725735745755765775785795805815825835845855865875885895905915925935945955965975985996006016026036046056066076086096106116126136146156166176186196206216226236246256266276286296306316326336346356366376386396406416426436446456466476486496506516526536546556566576586596606616626636646656666676686696706716726736746756766776786796806816826836846856866876886896906916926936946956966976986997007017027037047057067077087097107117127137147157167177187197207217227237247257267277287297307317327337347357367377387397407417427437447457467477487497507517527537547557567577587597607617627637647657667677687697707717727737747757767777787797807817827837847857867877887897907917927937947957967977987998008018028038048058068078088098108118128138148158168178188198208218228238248258268278288298308318328338348358368378388398408418428438448458468478488498508518528538548558568578588598608618628638648658668678688698708718728738748758768778788798808818828838848858868878888898908918928938948958968978988999009019029039049059069079089099109119129139149159169179189199209219229239249259269279289299309319329339349359369379389399409419429439449459469479489499509519529539549559569579589599609619629639649659669679689699709719729739749759769779789799809819829839849859869879889899909919929939949959969979989991000100110021003100410051006100710081009101010111012101310141015101610171018101910201021102210231024102510261027102810291030103110321033103410351036103710381039104010411042104310441045104610471048104910501051105210531054105510561057105810591060106110621063106410651066106710681069107010711072107310741075107610771078107910801081108210831084108510861087108810891090109110921093109410951096109710981099110011011102110311041105110611071108110911101111111211131114111511161117111811191120112111221123112411251126112711281129113011311132113311341135113611371138113911401141114211431144114511461147114811491150115111521153115411551156115711581159116011611162116311641165116611671168116911701171117211731174117511761177117811791180118111821183118411851186118711881189119011911192119311941195119611971198119912001201120212031204120512061207120812091210121112121213121412151216121712181219122012211222122312241225122612271228122912301231123212331234123512361237123812391240124112421243124412451246124712481249125012511252125312541255125612571258125912601261126212631264126512661267126812691270127112721273127412751276127712781279128012811282128312841285128612871288128912901291129212931294129512961297129812991300130

8/9/07

Directional Drilling