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District IV
1220 S St Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

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

HOBBS OGD

JUL 31 2012

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025- 40704	² Pool Code 97900	³ Pool Name WC Red Hills; Bone Spring Upper Shale
⁴ Property Code 38961	⁵ Property Name BROWN BEAR 36 STATE	⁶ Well Number #4H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3320'

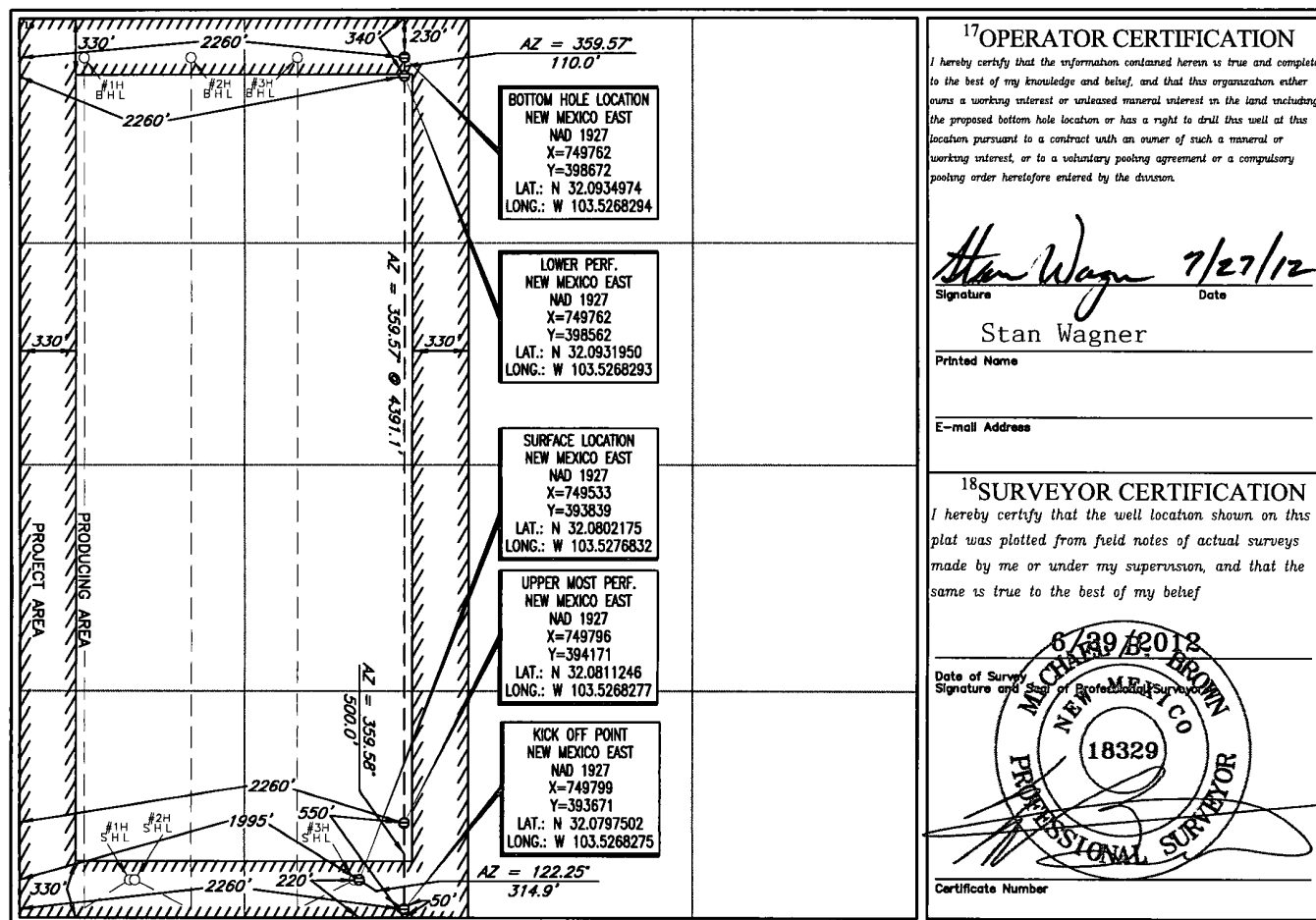
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
N	36	25-S	33-E	-	220'	SOUTH	1995'	WEST	LEA

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
C	36	25-S	33-E	-	230'	NORTH	2260'	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
320			

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.



¹⁷OPERATOR 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 undivided 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.

Stan Wagner 7/27/12
Signature Date

Stan Wagner

Printed Name

E-mail Address

¹⁸SURVEYOR 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 to the best of my belief

6/29/2012
Date of Survey
Signature and Seal of Professional Surveyor
MICHAEL J. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Certificate Number

AUG 01 2012

Permit Information:

Well Name: Brown Bear 36 State No. 4H

Location:

SL: 220' FSL & 1995' FWL, Section 36, T-25-S, R-33-E, Lea Co., N.M.

BHL: 230' FNL & 2260' FWL, Section 36, T-25-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 – 1000'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4000' – 5100'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-14,369'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
1000'	575	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	250	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,100'	1325	12.7	2.22	Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
14,369'	250	10.8	3.67	60:40:0 Class C + 15.0 pps BA-90 + 4% MPA-5 + 3.0% SMS + 5.0% A-10 + 1.0% BA-10A + 0.80% ASA-301 + 2.55% R-21 + 8.0 pps LCM-1
	550	11.8	2.38	50:50:10 Class H + 0.80% FL-52 + 0.30% ASA-301 + 0.40% SMS + 2.0% Salt + 0.30% R-21 + 3.0 pps LCM-1 + 0.25 pps Celloflake
	1200	14.2	1.28	50:50:2 Class H + 0.65% FL-52 + 0.45% CD-32 + 0.10% SMS + 2.0% Salt

Mud Program:

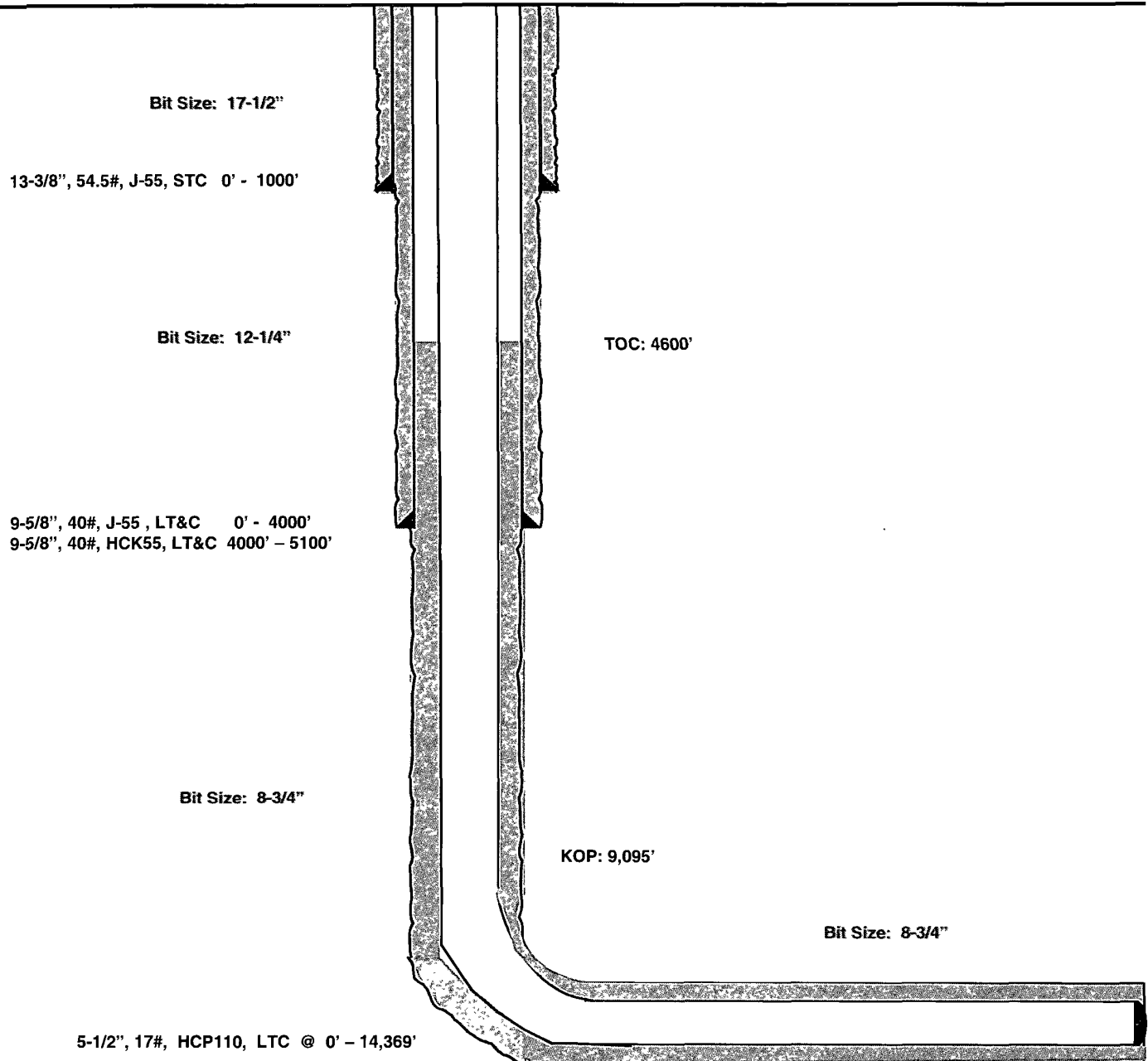
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1000'	Fresh - Gel	8.6-8.8	28-34	N/c
1000' – 5,100'	Brine	10.0-10.2	28-34	N/c
5,100' – 9,095'	Cut Brine	8.4-9.0	28-34	N/c
KOP – 14,369' Lateral	Cut Brine	9.0-9.5	40-42	8-10

**Brown Bear 36 State #4H
Red Hills
Lea County, New Mexico
Proposed Wellbore**

220' FSL
1995' FWL
Section 36
T-25-S, R-33-E

API: 30-025-

KB: 3,350'
GL: 3,320'



Lateral: 14,369' MD, 9,560' TVD

BH Location: 230' FNL & 2260' FWL
Section 36
T-25-S, R-33-E

Project: Lea County, NM (Nad27)
 Site: Brown Bear 36 State
 Well: Brown Bear 36 State 4H
 Wellbore: Wellbore #1
 Plan: Plan#1 072512
 Rig:

PROJECT DETAILS Lea County, NM (Nad27)
 Geodetic System US State Plane 1927 (Exact solution)
 Datum NAD 1927 (NADCON CONUS)
 Ellipsoid Clarke 1866
 Zone New Mexico East 3001
 System Datum Mean Sea Level
 Location North Grid

WELL DETAILS: Brown Bear 36 State 4H

Ground Level	3320 00
Northing	393639 00
Eastings	749533 00
Latitude	32° 4' 48 7633 N
Longitude	103° 31' 39 6618 W

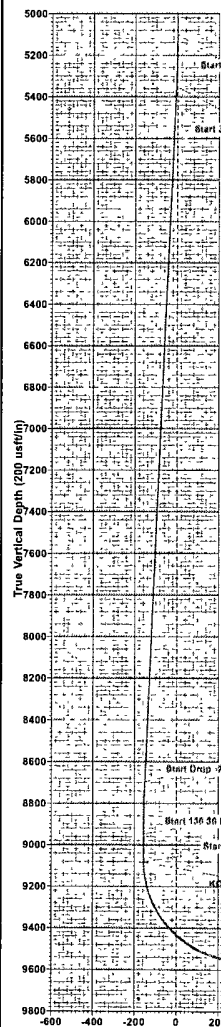
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Eastings	Shape
KOP Brown Bear 36 State 4H	9082 54	-168 00	266 00	393671 00	749799 00	Point
BHL Brown Bear 36 State 4H	9560 00	4833 00	229 00	398672 00	749762 00	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
5100 00	0 00	0 00	5100 00	0 00	0 00	0 00	0 00	0 00
5350 00	5 00	122 28	5349 68	-5 82	9 22	2 00	122 28	-5 38
8709 60	5 00	122 28	8696 49	-162 18	256 78	0 00	0 00	-149 84
8959 60	0 00	0 00	8946 18	-168 00	266 00	2 00	180 00	-155 22
9013 42	0 00	0 00	9000 00	-168 00	266 00	0 00	0 00	-155 22
9095 95	0 00	0 00	9082 54	-168 00	266 00	0 00	0 00	-155 22
9845 95	90 00	359 58	9560 00	309 45	262 47	12 00	359 58	321 53
14369 63	90 00	359 58	9560 00	4833 00	229 00	0 00	0 00	4838 42

BHL Brown Bear 36 State 4H



ANNOTATIONS

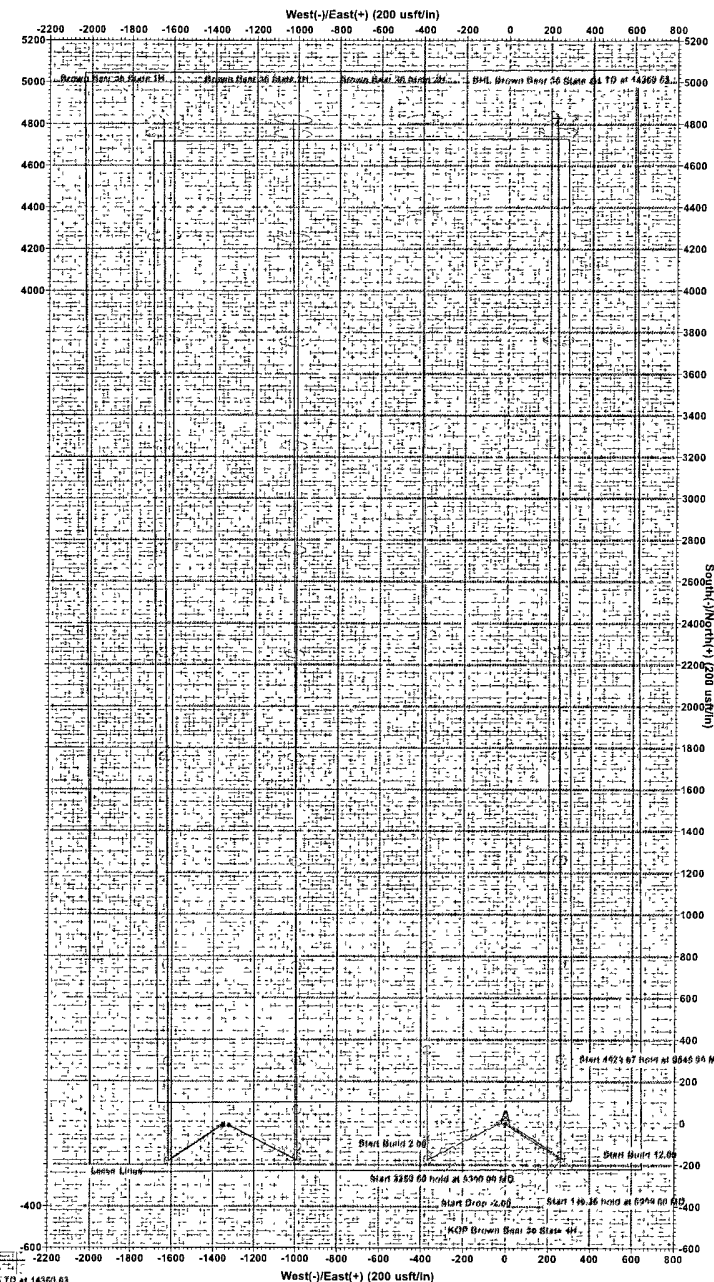
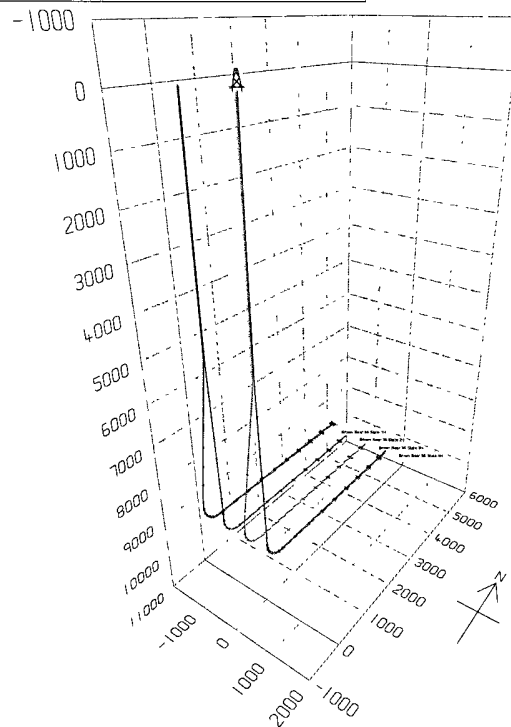
TVD	MD	Annotation
5100 00	5100 00	Start Build 2 00
5349 68	5350 00	Start 3359 60 hold at 5350 00 MD
8959 60	8709 60	Start Drop 2 00
8946 18	8959 60	Start 136 36 hold at 8959 60 MD
9082 53	9095 95	Start Build 12 00
9560 00	9845 95	Start 4523 67 hold at 9845 95 MD
9560 00	14369 63	TD at 14369 63

FORMATION TOP DETAILS

No formation data is available

Azimuths to Grid North
 True North -0 43°
 Magnetic North 6 99°

Magnetic Field
 Strength 48423 9nT
 Dip Angle 60 03°
 Date 07/25/2012
 Model IGRF2010_14



Vertical Section at 271° (200 usf/in)