Results of Directional Survey

API number:	30-025-41310			
OGRID:		Operator:	EOG RESOURCES INC	
		Property:	DILLLON 31	# 3H

surface	ULSTR:	O	31	T	24S	R	34E
				220	FSL	1755	FEL
BH Loc	ULSTR:	B	31	T	24S	R	34E
14252	MD	9450.6	TVD	235	FNL	1425	FEL
				5045	FSL		
Top Perf/OH	ULSTR:	O	31	T	24S	R	34E
9770	MD	9460.2	TVD	577	FSL	1467	FEL
Bot Perf/OH	ULSTR:	B	31	T	24S	R	34E
14110	MD	9457.2	TVD	377	FNL	1422	FEL
				4903	FSL		

	MD	N/S	E/W	VD
	9741	329.10	281.08	9458.95
TOP PERFS/OH	**9770**	357.18	288.23	9460.22
	9773	360.08	288.97	9460.35
	14067	4640.34	333.78	9459.22
BOT PERFS/OH	**14110**	4683.28	332.69	9457.16
	14162	4735.20	331.38	9454.66

NEXT TO LAST	14196	4769.15	330.82	9453.06
LAST READING	14252	4825.09	329.64	9450.62
TD	**14252**	4825.09	329.64	9450.62

Surface Location	220	FS	1755	FE
Projected BHL	5045	FS	1425	FE
Location of				
Top Perfs/OH	577	FS	1467	FE
Bottom Perfs/OH	4903	FS	1422	FE

SUMMARY of Subsurface Locations

Surface Location	O-31-24S-34E	220	FS	1755	FE	Vert. Depth
Top Perfs/OH	O-31-24S-34E	577	FS	1467	FE	9460.22
Bottom Perfs/OH	B-31-24S-34E	4903	FS	1422	FE	9457.16
Projected TD	B-31-24S-34E	5045	FS	1425	FE	9450.62

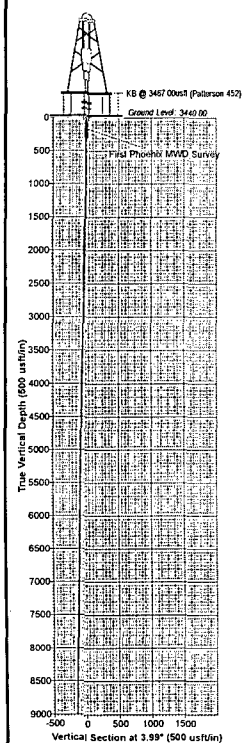
eog esources

Project: Lea County, NM (NAD27 NME)
Site: Dillon 31
Well: #3H
Wellbore: WB1/Job #1311422
Design: Plan #3 12-09-13
Rig: Patterson 452

PHOENIX TECHNOLOGY SERVICES

Azimuths to Grid North
True North: -0.44°
Magnetic North: 6.81°

Magnetic Field
Strength: 48343.7snT
Dip Angle: 60.08°
Date: 11/27/2013
Model: IGRF2010_14



WELL DETAILS

	+N/-S	+E/-W	Northing	Ground Level: Easting	3440.00 Latitude	Longitude
	0.00	0.00	425560.00	756117.00	32° 10' 2.18566 N	103° 30' 20.31015 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	1168.00	0.50	176.20	1165.79	-11.04	10.44	0.00	0.00	-10.28		Tie-on to Current Surveys
2	1225.00	0.50	176.20	1224.78	-11.55	10.47	0.00	0.00	-10.75		Projection to Bit
3	1300.00	0.50	176.20	1299.78	-12.20	10.52	0.00	0.00	-11.44		Begin 3°/100' Build
4	1337.85	1.50	140.00	1337.63	-12.75	10.85	3.00	-51.27	-11.96		Hold 1.5°, 140° Azm
5	8935.50	1.50	140.00	8932.67	-165.10	138.69	0.00	0.00	-155.04		Begin 3°/100' Drop
6	8985.50	0.00	0.00	8982.67	-165.60	139.11	3.00	180.00	-155.51		Begin 12°/100' Build
7	9735.29	90.00	17.78	9460.00	288.93	284.87	12.00	17.78	308.07		Begin 3°/100' Turn
8	10346.96	90.00	359.43	9460.00	891.13	375.99	3.00	-90.00	915.16		Hold 90°
9	12000.00	90.00	359.43	9460.00	2544.09	359.55	0.00	0.00	2562.96		Begin 3°/100' Build
10	12015.60	90.50	359.43	9459.93	2560.09	359.38	3.00	0.44	2579.70		Hold 90.5°
11	14282.11	90.50	359.43	9440.00	4826.00	337.00	0.00	0.00	4837.75	PBHL-Dillon 31 #3H v3	TD at 14282.11

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

Local Origin: Well #3H, Grid North

Latitude: 32° 10' 2.18566 N
Longitude: 103° 30' 20.31015 W

Grid East: 756117.00
Grid North: 425560.00
Scale Factor: 1.000

Geomagnetic Model: IGRF2010_14
Sample Date: 27-Nov-13
Magnetic Declination: 7.25°
Dip Angle from Horizontal: 60.08°
Magnetic Field Strength: 48344

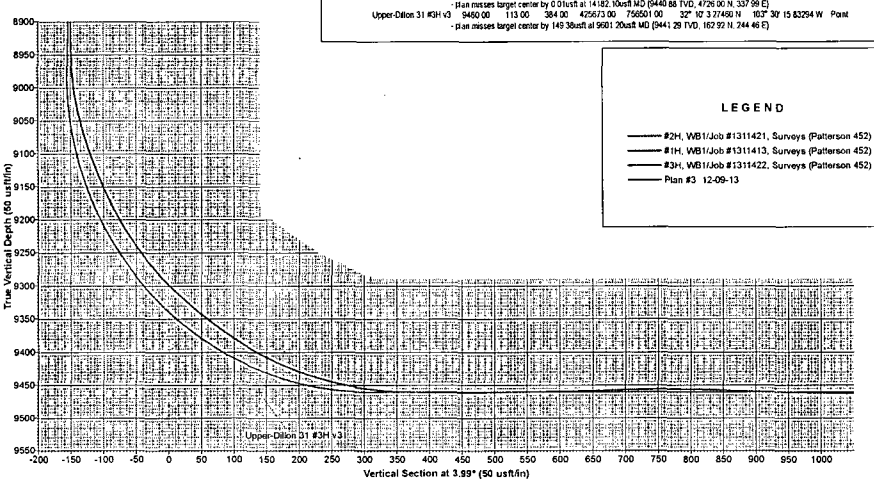
To convert a Magnetic Direction to a Grid Direction, Add 6.81°
To convert a Magnetic Direction to a True Direction, Add 7.25° East
To convert a True Direction to a Grid Direction, Subtract 0.44°

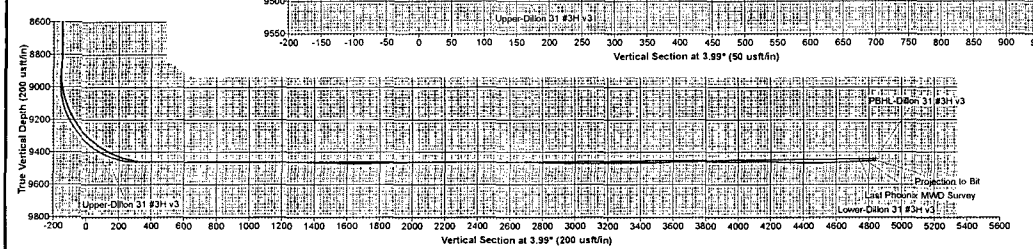
DESIGN TARGET DETAILS

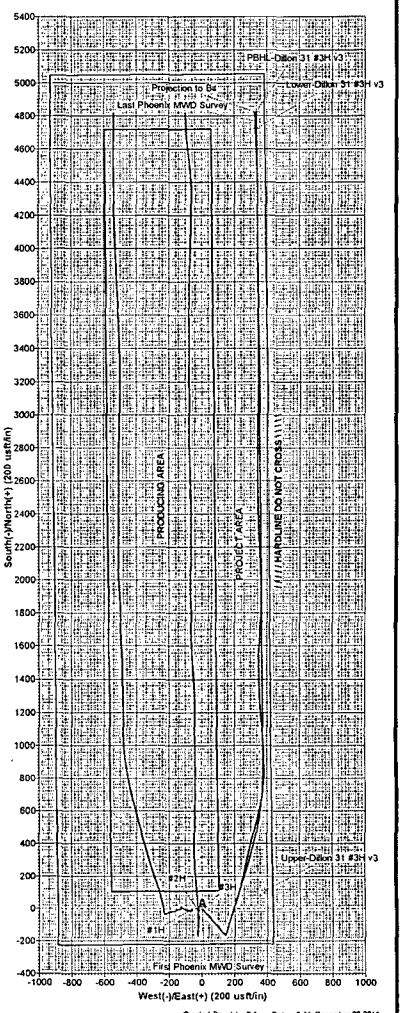
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL-Dillon 31 #3H v3	9440.00	4826.00	337.00	430386.00	756454.00	32° 10' 49.91531 N	103° 30' 15.95730 W	Point
- plan hits target center								
Lower-Dillon 31 #3H v3	9440.88	4726.00	338.00	430286.00	756455.00	32° 10' 48.92569 N	103° 30' 15.95463 W	Point
- plan misses target center by 0.01usft at 14182.10usft MD (9440.88 TVD, 4726.00 N, 337.99 E)								
Upper-Dillon 31 #3H v3	9460.00	113.00	384.00	425673.00	756501.00	32° 10' 3.77460 N	103° 30' 15.83294 W	Point
- plan misses target center by 149.36usft at 9681.20usft MD (9441.29 TVD, 162.92 N, 244.46 E)								

LEGEND

- #2H, WB1/Job #1311421, Surveys (Patterson 452) V0
- #1H, WB1/Job #1311413, Surveys (Patterson 452) V0
- #3H, WB1/Job #1311422, Surveys (Patterson 452) V0
- Plan #3 12-09-13







Created By: John Peha Date: 8:41, December 23 2013

eog esources

EOG Resources

Lea County, NM (NAD27 NME)
Dillon 31
#3H
WB1/Job #1311422

Survey: Phoenix MWD Surveys

Phoenix Final Survey Report

23 December, 2013

PHOENIX
TECHNOLOGY SERVICES

Company:	EOG Resources	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	KB @ 3467.00usft (Patterson 452)
Site:	Dillon 31	**MD Reference:**	KB @ 3467.00usft (Patterson 452)
Well:	#3H	**North Reference:**	Grid
Wellbore:	WB1/Job #1311422	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Patterson 452)	**Database:**	GCR DB

Project Lea County, NM (NAD27 NME)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Dillon 31

Site Position:		**Northing:**	425,560.00 usft	**Latitude:**	32° 10' 2.19023 N
From:	Map	**Easting:**	756,057.00 usft	**Longitude:**	103° 30' 21.00814 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.44 °

Well #3H

Well Position	**+N/-S**	0.00 usft	**Northing:**	425,560.00 usft	**Latitude:**	32° 10' 2.18566 N
	+E/-W	0.00 usft	**Easting:**	756,117.00 usft	**Longitude:**	103° 30' 20.31015 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,440.00 usft

Wellbore WB1/Job #1311422

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	11/27/13	7.25	60.08	48,344

Design Surveys (Patterson 452)

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	3.99

Survey Program **Date** 12/22/13

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
155.00	12,826.00	Phoenix MWD Surveys (WB1/Job #131142	MWD	MWD - Standard

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.00	1.30	201.00	154.99	-1.64	-0.63	-1.68	0.84
First Phoenix MWD Survey							
246.00	1.50	171.80	245.96	-3.78	-0.83	-3.83	0.80
341.00	1.80	133.90	340.92	-6.05	0.42	-6.01	1.17
432.00	1.70	95.80	431.88	-7.18	2.80	-6.97	1.26
527.00	1.80	87.40	526.84	-7.25	5.69	-6.84	0.29
621.00	1.10	97.20	620.81	-7.30	8.06	-6.72	0.79
717.00	0.40	147.70	716.80	-7.70	9.15	-7.04	0.94
812.00	0.40	143.90	811.80	-8.24	9.52	-7.56	0.03
895.00	0.40	141.30	894.80	-8.70	9.88	-8.00	0.02
987.00	0.40	170.80	986.80	-9.27	10.13	-8.55	0.22

Company:	EOG Resources	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	KB @ 3467.00usft (Patterson 452)
Site:	Dillon 31	**MD Reference:**	KB @ 3467.00usft (Patterson 452)
Well:	#3H	**North Reference:**	Grid
Wellbore:	WB1/Job #1311422	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Patterson 452)	**Database:**	GCR DB

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
1,079.00	0.70	167.60	1,078.79	-10.14	10.30	-9.40	0.33
1,166.00	0.50	176.20	1,165.79	-11.04	10.44	-10.28	0.25
1,273.00	0.70	158.50	1,272.78	-12.11	10.71	-11.34	0.25
1,457.00	2.20	154.10	1,456.72	-16.33	12.66	-15.41	0.82
1,648.00	2.90	132.00	1,647.53	-22.86	17.86	-21.57	0.63
1,839.00	2.90	134.10	1,838.29	-29.46	24.92	-27.65	0.06
2,030.00	1.60	130.60	2,029.13	-34.56	30.41	-32.36	0.68
2,221.00	1.60	123.40	2,220.06	-37.76	34.66	-35.26	0.11
2,412.00	0.80	124.60	2,411.02	-39.99	37.99	-37.25	0.42
2,603.00	1.00	116.60	2,601.99	-41.49	40.57	-38.57	0.12
2,794.00	0.90	146.50	2,792.97	-43.49	42.89	-40.40	0.26
2,985.00	0.90	133.80	2,983.94	-45.78	44.80	-42.55	0.10
3,176.00	1.10	112.70	3,174.92	-47.52	47.58	-44.10	0.22
3,366.00	2.80	162.70	3,364.81	-52.66	50.64	-49.01	1.19
3,557.00	2.80	150.80	3,555.58	-61.18	54.30	-57.26	0.30
3,748.00	2.00	148.10	3,746.41	-68.08	58.34	-63.86	0.42
3,939.00	1.20	141.50	3,937.34	-72.48	61.35	-68.04	0.43
4,130.00	0.90	162.50	4,128.31	-75.48	63.04	-70.91	0.25
4,321.00	0.50	162.70	4,319.29	-77.70	63.74	-73.08	0.21
4,512.00	0.50	96.80	4,510.29	-78.60	64.82	-73.90	0.28
4,702.00	0.80	144.40	4,700.28	-79.77	66.41	-74.96	0.31
4,893.00	2.10	134.30	4,891.21	-83.30	69.69	-78.25	0.69
5,084.00	1.90	134.10	5,082.09	-87.95	74.47	-82.55	0.10
5,116.00	1.80	131.00	5,114.08	-88.65	75.23	-83.20	0.44
5,263.00	1.70	130.60	5,261.01	-91.58	78.63	-85.89	0.07
5,358.00	1.90	136.10	5,355.96	-93.63	80.79	-87.78	0.28
5,549.00	1.60	132.40	5,546.87	-97.71	84.96	-91.56	0.17
5,740.00	1.80	121.90	5,737.79	-101.10	89.47	-94.63	0.19
5,931.00	2.00	118.20	5,928.68	-104.26	94.96	-97.40	0.12
6,122.00	2.20	149.30	6,119.56	-108.98	99.76	-101.78	0.60
6,312.00	0.90	151.90	6,309.49	-113.44	102.33	-106.04	0.69
6,503.00	0.70	124.80	6,500.47	-115.42	103.99	-107.91	0.22
6,694.00	1.10	152.30	6,691.45	-117.71	105.80	-110.07	0.30
6,885.00	1.40	155.20	6,882.40	-121.46	107.64	-113.67	0.16
7,076.00	1.40	141.20	7,073.34	-125.39	110.08	-117.43	0.18
7,267.00	1.20	138.20	7,264.30	-128.70	112.87	-120.54	0.11
7,458.00	1.40	146.30	7,455.25	-132.13	115.50	-123.78	0.14
7,649.00	1.60	132.00	7,646.18	-135.86	118.77	-127.26	0.22
7,840.00	1.50	149.60	7,837.11	-139.80	122.02	-130.97	0.25
8,031.00	1.80	134.50	8,028.03	-144.06	125.43	-134.98	0.28
8,222.00	1.80	127.70	8,218.94	-148.00	129.94	-138.59	0.11
8,412.00	1.80	133.30	8,408.85	-151.87	134.47	-142.14	0.09
8,603.00	1.70	120.50	8,599.76	-155.36	139.10	-145.31	0.21
8,794.00	1.50	139.60	8,790.68	-158.70	143.16	-148.36	0.30

Company:	EOG Resources	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	KB @ 3467.00usft (Patterson 452)
Site:	Dillon 31	**MD Reference:**	KB @ 3467.00usft (Patterson 452)
Well:	#3H	**North Reference:**	Grid
Wellbore:	WB1/Job #1311422	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Patterson 452)	**Database:**	GCR DB

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
8,871.00	1.40	147.50	8,867.66	-160.26	144.32	-149.83	0.29
8,913.00	1.10	136.30	8,909.65	-160.99	144.87	-150.52	0.92
8,945.00	1.80	39.20	8,941.64	-160.82	145.40	-150.31	6.95
8,977.00	4.90	22.70	8,973.59	-159.17	146.25	-148.61	10.05
9,009.00	8.80	13.50	9,005.35	-155.53	147.34	-144.90	12.62
9,040.00	12.60	12.40	9,035.81	-149.92	148.62	-139.21	12.28
9,072.00	16.30	12.10	9,066.79	-142.12	150.32	-131.31	11.56
9,104.00	19.50	11.60	9,097.24	-132.49	152.33	-121.57	10.01
9,136.00	22.20	12.30	9,127.14	-121.35	154.69	-110.29	8.47
9,168.00	25.10	15.20	9,156.45	-108.89	157.76	-97.65	9.76
9,199.00	28.30	17.70	9,184.14	-95.54	161.72	-84.06	10.94
9,231.00	32.20	19.20	9,211.78	-80.26	166.83	-68.45	12.41
9,263.00	36.00	19.60	9,238.27	-63.34	172.79	-51.16	11.90
9,295.00	40.50	18.50	9,263.40	-44.61	179.25	-32.03	14.22
9,327.00	45.00	18.30	9,286.89	-24.01	186.10	-11.00	14.07
9,359.00	47.80	18.20	9,308.95	-2.00	193.36	11.46	8.75
9,390.00	50.60	19.00	9,329.21	20.23	200.85	34.16	9.24
9,422.00	53.10	18.50	9,348.97	44.06	208.93	58.49	7.91
9,454.00	55.60	16.80	9,367.62	68.84	216.81	83.76	8.93
9,486.00	58.90	15.20	9,384.93	94.71	224.22	110.08	11.14
9,518.00	62.30	14.70	9,400.64	121.64	231.41	137.45	10.71
9,550.00	65.30	14.30	9,414.77	149.43	238.60	165.67	9.44
9,581.00	69.10	13.30	9,426.78	177.18	245.41	193.83	12.61
9,613.00	73.30	13.30	9,437.09	206.66	252.38	223.72	13.12
9,645.00	76.30	12.40	9,445.48	236.76	259.24	254.22	9.76
9,677.00	79.80	12.90	9,452.10	267.30	266.10	285.17	11.04
9,709.00	84.20	13.90	9,456.55	298.12	273.44	316.42	14.09
9,741.00	87.20	13.80	9,458.95	329.10	281.08	347.86	9.38
9,773.00	87.80	14.80	9,460.35	360.08	288.97	379.31	3.64
9,868.00	91.00	13.80	9,461.34	452.11	312.43	472.76	3.53
9,964.00	90.80	15.40	9,459.84	545.00	336.63	567.10	1.68
10,059.00	91.90	11.20	9,457.60	637.40	358.47	660.80	4.57
10,154.00	90.20	8.00	9,455.86	731.04	374.31	755.32	3.81
10,250.00	88.10	3.00	9,457.28	826.55	383.51	851.24	5.65
10,346.00	87.90	358.60	9,460.63	922.46	384.85	947.01	4.59
10,441.00	90.40	354.90	9,462.04	1,017.27	379.46	1,041.21	4.70
10,536.00	91.50	354.20	9,460.47	1,111.83	370.44	1,134.91	1.37
10,632.00	89.60	354.20	9,459.55	1,207.33	360.74	1,229.51	1.98
10,727.00	88.10	358.60	9,461.45	1,302.10	354.78	1,323.63	4.89
10,823.00	88.40	358.60	9,464.38	1,398.02	352.43	1,419.16	0.31
10,918.00	88.00	359.20	9,467.37	1,492.96	350.61	1,513.74	0.76
11,014.00	89.70	2.80	9,469.30	1,588.91	352.29	1,609.57	4.15
11,109.00	90.50	2.80	9,469.13	1,683.79	356.93	1,704.55	0.84
11,205.00	91.10	2.40	9,467.79	1,779.68	361.28	1,800.51	0.75
11,300.00	92.10	0.70	9,465.14	1,874.61	363.85	1,895.38	2.08

Company:	EOG Resources	**Local Co-ordinate Reference:**	Well #3H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	KB @ 3467.00usft (Patterson 452)
Site:	Dillon 31	**MD Reference:**	KB @ 3467.00usft (Patterson 452)
Well:	#3H	**North Reference:**	Grid
Wellbore:	WB1/Job #1311422	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Patterson 452)	**Database:**	GCR DB

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
11,395.00	92.00	359.20	9,461.74	1,969.54	363.77	1,990.08	1.58
11,490.00	90.00	358.00	9,460.08	2,064.49	361.45	2,084.64	2.46
11,586.00	89.40	356.90	9,460.58	2,160.39	357.18	2,180.01	1.31
11,681.00	89.30	356.90	9,461.66	2,255.25	352.04	2,274.28	0.11
11,777.00	92.60	358.90	9,460.07	2,351.15	348.52	2,369.71	4.02
11,872.00	89.10	358.70	9,458.66	2,446.11	346.53	2,464.29	3.69
11,967.00	89.30	358.30	9,459.99	2,541.07	344.04	2,558.85	0.47
12,063.00	91.10	359.80	9,459.65	2,637.05	342.45	2,654.48	2.44
12,158.00	88.00	1.20	9,460.40	2,732.02	343.28	2,749.29	3.58
12,254.00	87.60	0.50	9,464.08	2,827.94	344.71	2,845.07	0.84
12,349.00	88.80	359.80	9,467.07	2,922.89	344.95	2,939.81	1.46
12,444.00	90.80	0.20	9,467.40	3,017.89	344.95	3,034.58	2.15
12,540.00	90.10	0.40	9,466.64	3,113.88	345.46	3,130.37	0.76
12,635.00	90.70	359.80	9,465.98	3,208.88	345.62	3,225.15	0.89
12,731.00	91.60	0.70	9,464.05	3,304.86	346.04	3,320.93	1.33
12,826.00	89.50	0.00	9,463.14	3,399.85	346.62	3,415.72	2.33
12,922.00	91.10	0.20	9,462.64	3,495.84	346.79	3,511.50	1.68
13,017.00	92.40	0.20	9,459.74	3,590.79	347.12	3,606.24	1.37
13,112.00	91.60	359.50	9,456.42	3,685.73	346.87	3,700.94	1.12
13,208.00	89.30	358.50	9,455.67	3,781.71	345.20	3,796.56	2.61
13,303.00	89.00	358.70	9,457.08	3,876.67	342.87	3,891.13	0.38
13,399.00	89.30	0.00	9,458.50	3,972.65	341.79	3,986.80	1.39
13,494.00	91.80	0.50	9,457.59	4,067.64	342.20	4,081.59	2.68
13,590.00	88.20	359.30	9,457.59	4,163.62	342.03	4,177.33	3.95
13,685.00	88.10	359.90	9,460.66	4,258.57	341.37	4,272.00	0.64
13,780.00	88.40	359.30	9,463.56	4,353.52	340.71	4,366.68	0.71
13,876.00	90.50	358.50	9,464.48	4,449.49	338.86	4,462.29	2.34
13,971.00	91.60	358.80	9,462.74	4,544.45	336.63	4,556.86	1.20
14,067.00	92.60	357.80	9,459.22	4,640.34	333.78	4,652.32	1.47
14,162.00	92.90	359.30	9,454.66	4,735.20	331.38	4,746.78	1.61
14,196.00	92.50	358.80	9,453.06	4,769.15	330.82	4,780.61	1.88
Last Phoenix MWD Survey							
14,252.00	92.50	358.80	9,450.62	4,825.09	329.64	4,836.33	0.00
Projection to Bit							

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
155.00	154.99	-1.64	-0.63	First Phoenix MWD Survey
14,196.00	9,453.06	4,769.15	330.82	Last Phoenix MWD Survey
14,252.00	9,450.62	4,825.09	329.64	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____

CURRENT WELL SKETCH

eog resources

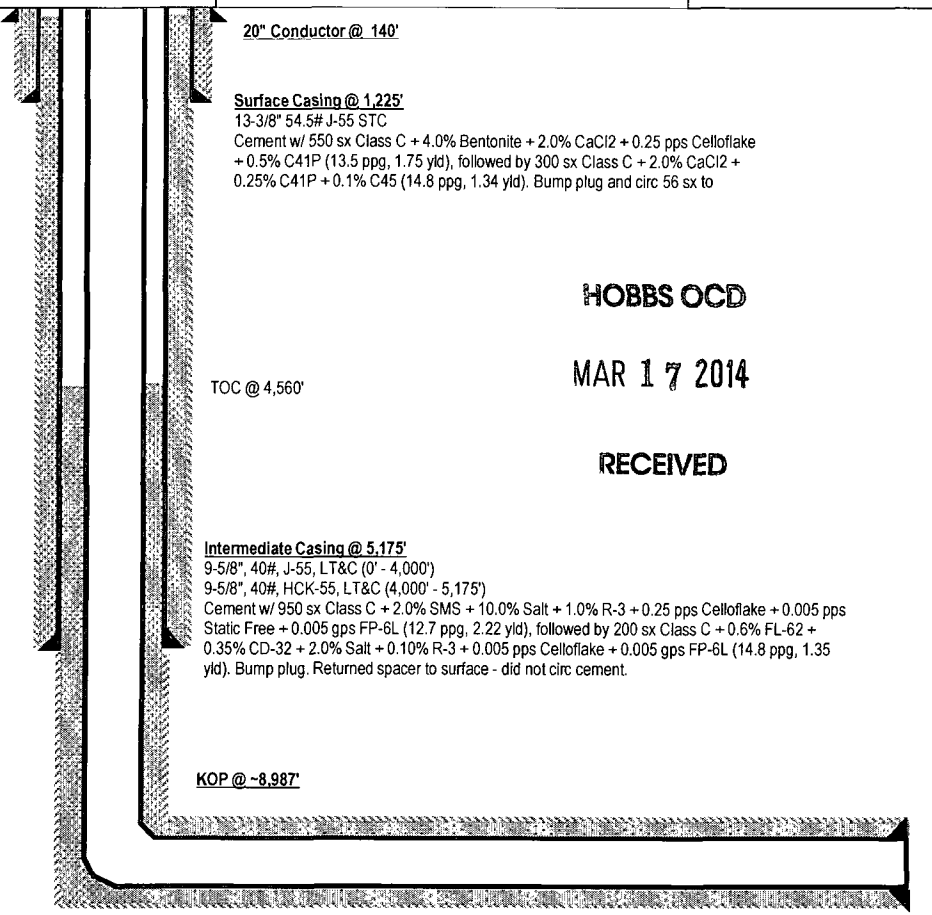
OGRID: 7377
API: 30-025-41310
AFE: 105701
SPUD: 12/7/13 @ 17:15 hrs
FRR: 12/25/13 @ 21:00 hrs
RIG: Patterson #452

Dillon 31 #3H
Red Hills Field
Lea County, New Mexico

SURF: 220' FSL & 1755' FEL
LOC: Sec. 31
SURVEY: T-24-S, R-34-E
GL: 3440.0'
KB: 3467.0'
ZERO: 27.0' AGL

DEPTH (ft)	MARKERS (KB)
2,000'	Rustler - 1155'
	T/ Salado - 1405'
3,000'	
5,000'	B / Salado - 4960'
	Lamar - 5240'
	Bell Canyon - 5270'
6,000'	
	Cherry Canyon - 6250'
7,000'	
8,000'	Brushy Canyon - 7770'
9,000'	Leonard - 9090'
	Bone Spring Lime - 9250'
10,000'	
11,000'	PTD - ~9,565'

LITHOLOGY



20" Conductor @ 140'

Surface Casing @ 1,225'
13-3/8" 54.5# J-55 STC
Cement w/ 550 sx Class C + 4.0% Bentonite + 2.0% CaCl2 + 0.25 pps Celloflake + 0.5% C41P (13.5 ppg, 1.75 yld), followed by 300 sx Class C + 2.0% CaCl2 + 0.25% C41P + 0.1% C45 (14.8 ppg, 1.34 yld). Bump plug and circ 56 sx to

HOBBS OCD

MAR 17 2014

RECEIVED

TOC @ 4,560'

Intermediate Casing @ 5,175'
9-5/8", 40#, J-55, LT&C (0' - 4,000')
9-5/8", 40#, HCK-55, LT&C (4,000' - 5,175')
Cement w/ 950 sx Class C + 2.0% SMS + 10.0% Salt + 1.0% R-3 + 0.25 pps Celloflake + 0.005 pps Static Free + 0.005 gps FP-6L (12.7 ppg, 2.22 yld), followed by 200 sx Class C + 0.6% FL-62 + 0.35% CD-32 + 2.0% Salt + 0.10% R-3 + 0.005 pps Celloflake + 0.005 gps FP-6L (14.8 ppg, 1.35 yld). Bump plug. Returned spacer to surface - did not circ cement.

KOP @ ~8,987'

Production Casing @ 14,252' MD, 9,453' TVD
5-1/2" 17# HCP-110 LTC (MJ @ 8829')
Cement w/ 330 sx 60:40 Class C + 15 pps BA-90 + 1.0% EC-1 + 8 pps LCM-1 (10.8 ppg, 3.71 yld), followed by, 425 sx 50:50:6 Class C + 1.6% SMS + 5.0% Salt + 1.0% EC-1 + 0.005 pps Static Free (11.9 ppg, 2.36 yld), followed by 1300 sx 50:50:2 Class C + 0.65% FL-52 + 7.0% CD-32 + 1.0% EC-1 (14.2 ppg, 1.30 yld). Bump plug and over-displace w/ 1 bbl. Did not circ cement

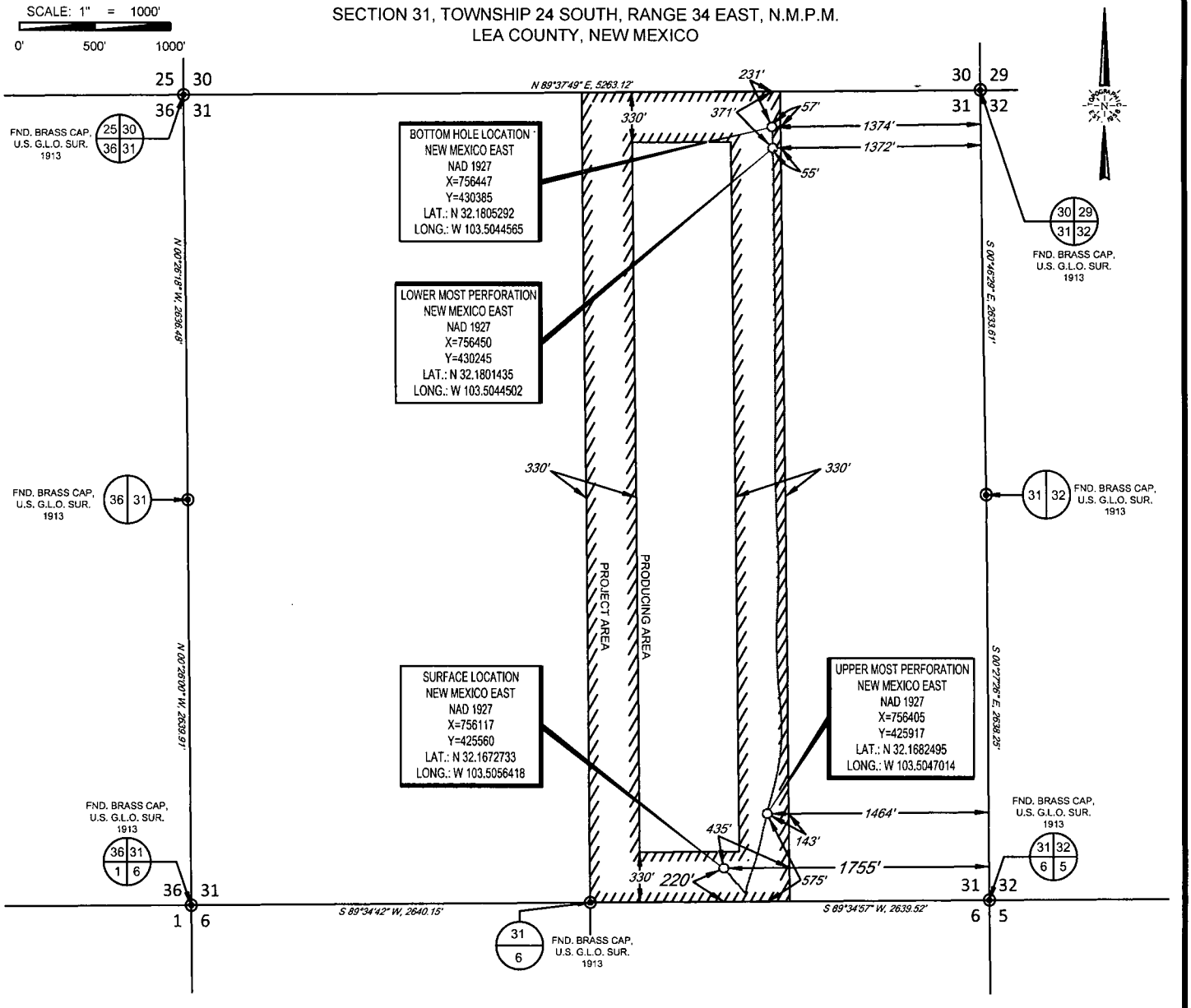
HOLE SIZE	MW (ppg)	MUD	BHST (°F)	LOT (ppg)	EVALUATION
17-1/2"	8.6 – 9.0	FW	86	N/A	
12-1/4"	10.0 – 10.2	Brine	117	NA	
8-3/4"	8.4 – 9.3	WBM	140	N/A	

Drlg Eng:	R. Brosig
Date:	12/26/2013

SCALE: 1" = 1000'

0' 500' 1000'

SECTION 31, TOWNSHIP 24 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: DILLON 31 #3H

SECTION 31 TWP 24-S RGE 34-E SURVEY N.M.P.M.

COUNTY LEA STATE NM ELEVATION 3440'

DESCRIPTION 220' FSL & 1755' FEL

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

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Michael Blake Brown, P.S. No. 18329

FEBRUARY 5, 2014

eog resources, inc.

DILLON 31 #3H AS-COMPLETED	REVISION: INT	DATE
DATE: 02/05/14		
FILE: AD_DILLON31_3H		
DRAWN BY: S.V.		
SHEET: 1 OF 1		

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 1 1"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 19 27.
3. THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

S:\SURVEY\EOG_MIDLAND\DILLON_31\FINAL_PRODUCTS\AD_DILLON31_3H.DWG 2/5/2014 1:47:51 PM svillagrana