

(v) 4:25 PM on 4-24-2006

Left Ocean a voice mail message
to provide me copies of the actual
directional surveys on the four existing
wells within each of the 4 requested
units/Pt's

⚠ Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Stogner, Michael, EMNRD

From: Ocean Munds-Dry [Omundsdry@hollandhart.com]

Sent: Wed 4/26/2006 2:58 PM

To: Stogner, Michael, EMNRD

Cc:

Subject: FW: SD Applications

Attachments: ☐ Yellow B 7 Fee #1H Gyro.TXT(7KB) ☐ Yellow B 7 Fee #1H Final Surveys.xls(45KB) ☐ YELLOW_A_7FEE_1H - Survey Report.pdf(40KB) ☐ Yellow A 7 Fee 1H-Survey.xls(51KB) ☐ RIO GRANDE 23 FED #1H GYRO (COMP).TXT(14KB) ☐ Platte #23 Fee Com #2H Gyro.txt(8KB) ☐ Platte 23 Fee Com #2H Final Surveys.xls (49KB) ☐ Rio Grande 23 Fed #1H Surveys.pdf(240KB)

Mr. Stogner:

Pursuant to your request, please find directional surveys for each of the simultaneous dedication applications for EOG. Please let me know if you need anything further.

Thank you,
Ocean

From: Donny_Glanton@eogresources.com [mailto:Donny_Glanton@eogresources.com]

Sent: Wednesday, April 26, 2006 2:46 PM

To: Ocean Munds-Dry

Cc: Rick_Lanning@eogresources.com

Subject: SD Applications

Dear Oceans,

As per your request to Mr. Lanning, please find the actual directional surveys of the four (4) wells identified below.

Let me know if you need anything further in this regard,

Donny G. Glanton
432-686-3642

@ 4:25 PM on 4-24-2006

Left Ocean a voice mail message to provide me copies of the actual directional survey on ~~the~~ the existing well within the existing 320-acre ~~spacing~~ spacing unit/project area.

Shs

----- Forwarded by Rick Lanning/EOGResources on 04/24/2006 05:54 PM -----

"Ocean Munds-Dry" <Omundsdry@hollandhart.com>

To <Rick_Lanning@eogresources.com>

04/24/2006 05:34 PM

cc
Subject SD applications

Hi Rick:

Mr. Stogner at the NMOCD just called regarding the 4 simultaneous dedication applications we filed for EOG for the: Yellow A7 Fee 1H and 2H, the Yellow B7 Fee 1H and 2H; the Platte Well No. 1H and 2H and the Rio Grande "23" Fed Well No. 1H and 2H. He asked that we send him the actual directional surveys for the 4 existing wells in each of these applications. He said they are not up on the OCD website yet so he can't look them up himself. Do you have these surveys and if so, can you forward to me so I can get them to Stogner? It occurs to me that these might not all be your applications and in that case I'm not sure who they belong to - if you could help in directing them to the right person, I'd appreciate it.

Thanks,
Ocean

Ocean Munds-Dry
Holland & Hart LLP
110 N. Guadalupe Suite 1
Santa Fe, NM 87501
Phone (505) 988-4421
Fax (866) 851-8340
E-mail: Omundsdry@hollandhart.com

EOG Resources Inc
Survey Report

Company: EOG Resources

Field: Thames

Site: Rio Grande 23 Fed #1H

Well: Rio Grande 23 Fed #1H

Wellpath: Lateral

Field: Thames

Date: 9/21/2005

Time: 10:40:41

Page: 1

Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #1H, Grid North

Vertical (TVD) Reference: SITE 3641.0

Section (VS) Reference: Well (0.00N,0.00E,0.16Azi)

Survey Calculation Method: Minimum Curvature

Db: Sybase

Map System:US State Plane Coordinate System 1927

Geo Datum: NAD27 (Clarke 1866)

Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone

Coordinate System: Site Centre

Geomagnetic Model: igrf2000

Site: Rio Grande 23 Fed #1H

Site Position: Northing: 692274.00 ft

From: Map Easting: 432662.00 ft

Position Uncertainty: 0.00 ft

Ground Level: 3623.00 ft

Latitude: 32 54 10.611 N

Longitude: 104 33 9.840 W

North Reference: Grid

Grid Convergence: -0.12 deg

Well: Rio Grande 23 Fed #1H

Slot Name:

Well Position: S 0.00 ft

Northing: 692274.00 ft

Latitude: 32 54 10.611 N

W 0.00 ft

Easting : 432662.00 ft

Longitude: 104 33 9.840 W

Position Uncertainty: 0.00 ft

Wellpath: Lateral

Current Datum: SITE

Magnetic Data: 7/27/2005

Field Strength: 49696 nT

Vertical Section:Depth From (TVD)

Drilled From: Surface

Tie-on Depth: 0.00 ft

Above System Datum: Mean Sea Level

Declination: 9.04 deg

Mag Dip Angle: 60.88 deg

Height 3641.00 ft

S 0.00 ft

W 0.00 ft

Direction

4900.00 ft

0.00

0.16

Survey: Gyro

Start Date: 9/21/2005

Company: EOG Resources Inc
Tool: Keeper Cone, ()

Engineer:
Tried-to:

eog
From Surface

Survey: Gyro		Incl		Azim		TVD		S		W		VS		DLS		Build		Turn		Tool/Comment	
MD	ft	deg	deg	deg	deg	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	deg/100ft		
0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	Keeper Cone
100.00		0.54		270.23		100.00		0.00		-0.47		0.00		0.00		0.54		0.54		0.00	Keeper Cone
200.00		0.62		265.85		199.99		-0.04		-1.48		-0.04		-0.04		0.09		0.08		-4.38	Keeper Cone
300.00		0.05		280.82		299.99		-0.07		-2.06		-0.07		-0.07		0.57		-0.57		14.97	Keeper Cone
400.00		0.99		97.00		399.99		-0.16		-1.25		-0.17		-0.17		1.04		0.94		176.18	Keeper Cone
500.00		1.17		99.42		499.97		-0.44		0.61		-0.43		-0.43		0.19		0.18		2.42	Keeper Cone
		1.10		111.70		599.95		-0.96		2.51		-0.95		-0.95		0.25		-0.07		12.28	Keeper Cone
		1.49		127.91		699.92		-2.11		4.43		-2.10		-2.10		0.53		0.39		16.21	Keeper Cone
		1.39		128.00		799.89		-3.66		6.41		-3.64		-3.64		0.10		-0.10		0.09	Keeper Cone
		1.35		133.40		899.86		-5.21		8.22		-5.19		-5.19		0.14		-0.04		5.40	Keeper Cone
1000.00		1.28		134.08		999.84		-6.80		9.88		-6.77		-6.77		0.07		-0.07		0.68	Keeper Cone
1100.00		1.14		141.32		1099.82		-8.35		11.31		-8.32		-8.32		0.21		-0.14		7.24	Keeper Cone
1200.00		1.03		137.64		1199.80		-9.79		12.53		-9.76		-9.76		0.13		-0.11		-3.68	Keeper Cone
1300.00		0.86		144.41		1299.78		-11.07		13.58		-11.03		-11.03		0.20		-0.17		6.77	Keeper Cone
1400.00		0.76		151.34		1399.77		-12.26		14.33		-12.22		-12.22		0.14		-0.10		6.93	Keeper Cone
1500.00		0.77		154.85		1499.76		-13.45		14.94		-13.41		-13.41		0.05		0.01		3.51	Keeper Cone
1600.00		0.77		165.11		1599.76		-14.71		15.39		-14.67		-14.67		0.14		0.00		10.26	Keeper Cone
1700.00		0.63		148.90		1699.75		-15.83		15.85		-15.78		-15.78		0.24		-0.14		-16.21	Keeper Cone
1800.00		0.50		183.20		1799.74		-16.73		16.11		-16.69		-16.69		0.36		-0.13		34.30	Keeper Cone
1900.00		0.30		183.69		1899.74		-17.43		16.07		-17.39		-17.39		0.20		-0.20		0.49	Keeper Cone
2000.00		0.13		158.32		1999.74		-17.80		16.09		-17.75		-17.75		0.19		-0.17		-25.37	Keeper Cone
2100.00		0.22		135.96		2099.74		-18.04		16.27		-18.00		-18.00		0.11		0.09		-22.36	Keeper Cone
2200.00		0.20		138.26		2199.74		-18.31		16.52		-18.26		-18.26		0.02		-0.02		2.30	Keeper Cone
2300.00		0.23		146.23		2299.74		-18.61		16.75		-18.56		-18.56		0.04		0.03		7.97	Keeper Cone
2400.00		0.40		168.93		2399.74		-19.12		16.92		-19.07		-19.07		0.21		0.17		22.70	Keeper Cone

EOG Resources Inc
Survey Report

Company: EOG Resources
Field: Thames
Site: Rio Grande 23 Fed #1H
Well: Rio Grande 23 Fed #1H
Wellpath: Lateral

Date: 9/21/2005
Co-ordinate(NE) Reference: Site: Rio Grande 23 Fed #1H, Grid North
Vertical (TVD) Reference: SITE 3641.0
Section (VS) Reference: Well (0.00N,0.00E,0.16Azi)
Survey Calculation Method: Minimum Curvature

Time: 10:40:41
Page: 2
Db: Sybase

Survey: Gyro		Incl		Azim		TVD		S		W		VS		DLS		Build		Turn		Tool/Comment	
MD	ft	deg	deg	deg	deg	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	deg/100ft		
2500.00		0.46		173.27		2499.73		-19.86		17.04		-19.81		0.07		0.06		4.34		Keeper Cone	
2600.00		0.37		181.81		2599.73		-20.58		17.08		-20.53		0.11		-0.09		8.54		Keeper Cone	
2700.00		0.31		162.69		2699.73		-21.16		17.15		-21.11		0.13		-0.06		-19.12		Keeper Cone	
2800.00		0.34		148.79		2799.73		-21.67		17.38		-21.62		0.08		0.03		-13.90		Keeper Cone	
2900.00		0.11		187.32		2899.73		-22.02		17.52		-21.97		0.26		-0.23		38.53		Keeper Cone	
3000.00		0.17		201.29		2999.73		-22.25		17.46		-22.21		0.07		0.06		13.97		Keeper Cone	
3100.00		0.23		204.67		3099.73		-22.58		17.32		-22.53		0.06		0.06		3.38		Keeper Cone	
3200.00		0.46		212.61		3199.72		-23.10		17.02		-23.05		0.23		0.23		7.94		Keeper Cone	
3300.00		0.41		196.17		3299.72		-23.78		16.70		-23.73		0.13		-0.05		-16.44		Keeper Cone	
3400.00		0.37		166.55		3399.72		-24.44		16.68		-24.39		0.20		-0.04		-29.62		Keeper Cone	
3500.00		0.49		169.38		3499.72		-25.17		16.83		-25.12		0.12		0.12		2.83		Keeper Cone	
3600.00		0.49		153.59		3599.71		-25.97		17.10		-25.92		0.13		0.00		-15.79		Keeper Cone	
3700.00		0.61		145.51		3699.71		-26.79		17.59		-26.75		0.14		0.12		-8.08		Keeper Cone	
3800.00		0.82		141.87		3799.70		-27.80		18.34		-27.74		0.21		0.21		-3.64		Keeper Cone	
3900.00		1.14		142.97		3899.69		-29.15		19.38		-29.10		0.32		0.32		1.10		Keeper Cone	
4000.00		1.40		140.45		3999.66		-30.89		20.75		-30.83		0.27		0.26		-2.52		Keeper Cone	
4100.00		1.46		138.77		4099.63		-32.79		22.37		-32.73		0.07		0.06		-1.68		Keeper Cone	
4200.00		1.77		130.25		4199.59		-34.75		24.39		-34.68		0.39		0.31		-8.52		Keeper Cone	
4300.00		1.83		131.87		4299.54		-36.81		26.76		-36.73		0.08		0.06		1.62		Keeper Cone	
4400.00		1.84		131.22		4399.49		-38.93		29.15		-38.85		0.02		0.01		-0.65		Keeper Cone	
4500.00		1.89		130.58		4499.44		-41.06		31.61		-40.97		0.05		0.05		-0.64		Keeper Cone	
4600.00		1.90		133.45		4599.38		-43.28		34.07		-43.18		0.10		0.01		2.87		Keeper Cone	
4700.00		1.87		134.86		4699.33		-45.57		36.43		-45.46		0.06		-0.03		1.41		Keeper Cone	

4800.00	1.78	134.61	4799.28	-47.81	38.69	-47.70	0.09	-0.09	-0.25	Keeper Cone
4900.00	1.59	131.71	4899.23	-49.82	40.83	-49.71	0.21	-0.19	-2.90	Keeper Cone
5000.00	1.57	125.57	4999.20	-51.54	42.98	-51.42	0.17	-0.02	-6.14	Keeper Cone
5010.00	1.26	133.24	5009.19	-51.70	43.17	-51.58	3.63	-3.10	76.70	Keeper Cone

PathFinder

Survey Report

Company: EOG Resources	Date: 10/25/2005	Time: 16:12:04	Page: 1
Field: Thames Field	Co-ordinate(NE) Reference:	Site: Rio Grande 23 Federal #1	
Site: Rio Grande 23 Federal #1	Vertical (TVD) Reference:	SITE 0.0	
Well: Sec. 23 T16-S R24-E	Section (VS) Reference:	Well (0.00N,0.00E,0.16Azi)	
Wellpath: Original Hole	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Field: Thames Field
Eddy, Co. NM
USA

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Site Centre
Geomagnetic Model: igrf2005

Site: Rio Grande 23 Federal #1

Section 23, T16-S, R24-E

Site Position:	Northing: 692274.00 ft	Latitude: 32 54 10.611 N
From: Map	Easting: 432662.00 ft	Longitude: 104 33 9.840 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3623.00 ft		Grid Convergence: -0.12 deg

Well: Sec. 23 T16-S R24-E

Slot Name:

Well Position: +N/-S 0.00 ft	Northing: 692274.00 ft	Latitude: 32 54 10.611 N
+E/-W 0.00 ft	Easting: 432662.00 ft	Longitude: 104 33 9.840 W
Position Uncertainty: 0.00 ft		

Wellpath: Original Hole

Current Datum: SITE
Magnetic Data: 9/21/2005
Field Strength: 49524 nT
Vertical Section: Depth From (TVD)
ft

Height 0.00 ft

+N/-S
ft

Drilled From: Surface
Tie-on Depth: 0.00 ft
Above System Datum: Mean Sea Level
Declination: 8.76 deg
Mag Dip Angle: 60.78 deg
+E/-W
ft

Direction
deg

0.00

0.00

0.00

0.16

Survey: PathFinder MWD Surveys

Start Date: 9/26/2005

Company: PathFinder Energy Services
Tool:

Engineer: Ron McIntyre
Tied-to: From: Definitive Path

Survey: PathFinder MWD Surveys

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
4200.00	1.77	130.25	4199.59	-34.75	24.39	-34.68	0.00	0.00	0.00	Tie-In to SDI Gyro Begin PathFinder MWD Survey
4248.00	1.58	105.17	4247.57	-35.40	25.59	-35.33	1.56	-0.40	-52.25	
4280.00	2.02	41.98	4279.56	-35.09	26.40	-35.02	6.01	1.37	-197.47	
4312.00	4.84	11.13	4311.50	-33.35	27.03	-33.27	10.23	8.81	-96.41	
4344.00	8.71	1.73	4343.27	-29.60	27.37	-29.52	12.54	12.09	-29.37	
4375.00	12.31	359.00	4373.75	-23.95	27.38	-23.87	11.72	11.61	-8.81	Tie-In for ST1
4407.00	16.27	359.53	4404.75	-16.05	27.29	-15.98	12.38	12.37	1.66	
4439.00	20.14	359.70	4435.14	-6.06	27.22	-5.98	12.09	12.09	0.53	
4470.00	24.36	359.70	4463.83	5.68	27.16	5.75	13.61	13.61	0.00	
4502.00	28.75	359.44	4492.44	19.98	27.05	20.06	13.72	13.72	-0.81	
4533.00	33.41	359.18	4518.99	35.98	26.85	36.05	15.04	15.03	-0.84	
4565.00	37.81	359.00	4545.00	54.60	26.56	54.68	13.75	13.75	-0.56	
4596.00	41.86	358.91	4568.80	74.45	26.19	74.53	13.07	13.06	-0.29	
4628.00	45.90	359.18	4591.86	96.63	25.83	96.70	12.64	12.62	0.84	
4660.00	50.21	359.09	4613.24	120.42	25.47	120.49	13.47	13.47	-0.28	
4692.00	54.52	358.65	4632.78	145.75	24.96	145.82	13.51	13.47	-1.37	
4723.00	57.86	357.51	4650.02	171.49	24.10	171.55	11.20	10.77	-3.68	
4755.00	61.03	356.89	4666.29	199.01	22.75	199.07	10.05	9.91	-1.94	
4787.00	64.46	357.44	4680.94	227.42	21.34	227.47	10.83	10.72	1.72	
4819.00	68.24	358.23	4693.78	256.70	20.24	256.76	12.03	11.81	2.47	
4851.00	72.02	358.30	4704.65	286.78	19.33	286.83	11.81	11.81	0.22	
4883.00	75.97	358.74	4713.47	317.52	18.53	317.57	12.41	12.34	1.37	



PathFinder Survey Report

Company: EOG Resources
Field: Thames Field
Site: Rio Grande 23 Federal #1
Well: Sec. 23 T16-S R24-E
Wellpath: Original Hole

Date: 10/25/2005 Time: 16:12:04 Page: 2
Co-ordinate(NE) Reference: Site: Rio Grande 23 Federal #1
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,0.16Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Annotation

MD ft	TVD ft	
4200.00	4199.59	Tie-In to SDI Gyro
4248.00	4247.57	Begin PathFinder MWD Surveys
4692.00	4632.78	Tie-In for ST1

PathFinder

Survey Report

Company: EOG Resources	Date: 10/25/2005	Time: 16:14:03	Page: 1
Field: Thames Field	Co-ordinate(NE) Reference:	Site: Rio Grande 23 Federal #1	
Site: Rio Grande 23 Federal #1	Vertical (TVD) Reference:	SITE 0.0	
Well: Sec. 23 T16-S R24-E	Section (VS) Reference:	Well (0.00N,0.00E,0.16Azi)	
Wellpath: Original Hole	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Field: Thames Field	Map System: US State Plane Coordinate System 1927	Map Zone: New Mexico, Eastern Zone
Eddy, Co. NM	Geo Datum: NAD27 (Clarke 1866)	Coordinate System: Site Centre
USA	Sys Datum: Mean Sea Level	Geomagnetic Model: igrf2005

Site: Rio Grande 23 Federal #1

Section 23, T16-S, R24-E

Site Position:	Northing: 692274.00 ft	Latitude: 32 54 10.611 N
From: Map	Easting: 432662.00 ft	Longitude: 104 33 9.840 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3623.00 ft		Grid Convergence: -0.12 deg

Well: Sec. 23 T16-S R24-E

Slot Name:

Well Position: +N/-S 0.00 ft	Northing: 692274.00 ft	Latitude: 32 54 10.611 N
+E/-W 0.00 ft	Easting: 432662.00 ft	Longitude: 104 33 9.840 W
Position Uncertainty: 0.00 ft		

Wellpath: Original Hole

Current Datum: SITE	Height 0.00 ft	Drilled From: Surface
Magnetic Data: 9/21/2005		Tie-on Depth: 0.00 ft
Field Strength: 49524 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)		Declination: 8.76 deg
ft	+N/-S ft	Mag Dip Angle: 60.78 deg
		+E/-W ft
		Direction deg
0.00	0.00	0.00
		0.16

Survey: PathFinder ST Surveys

Start Date: 9/29/2005

Company: PathFinder Energy Services

Engineer: Ron McIntyre

Tool:

Tied-to:

From: Definitive Path

Survey: PathFinder ST Surveys

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
4200.00	1.77	130.25	4199.59	-34.75	24.39	-34.68	0.00	0.00	0.00	Tie-In to SDI Gyro
4248.00	1.58	105.17	4247.57	-35.40	25.59	-35.33	1.56	-0.40	-52.25	Begin PathFinder MWD Sur
4692.00	54.52	358.65	4632.78	145.75	24.96	145.82	12.38	11.92	-23.99	Tie-In for ST1
4718.00	53.29	353.29	4648.10	166.69	23.50	166.76	17.31	-4.73	-20.62	
4761.00	59.53	349.24	4671.89	202.06	18.01	202.11	16.49	14.51	-9.42	
4793.00	65.16	350.50	4686.73	229.95	13.04	229.99	17.94	17.59	3.94	
4825.00	70.08	351.88	4698.91	259.19	8.52	259.21	15.88	15.37	4.31	
4856.00	75.18	352.67	4708.17	288.49	4.54	288.51	16.63	16.45	2.55	
4888.00	78.70	354.87	4715.40	319.48	1.16	319.48	12.88	11.00	6.87	
4920.00	81.87	357.95	4720.80	350.95	-0.81	350.94	13.72	9.91	9.62	
4952.00	84.42	0.41	4724.62	382.71	-1.26	382.70	11.03	7.97	7.69	
4984.00	86.53	0.41	4727.14	414.61	-1.03	414.60	6.59	6.59	0.00	
5015.00	86.97	0.58	4728.90	445.56	-0.76	445.55	1.52	1.42	0.55	
5047.00	88.81	0.14	4730.08	477.53	-0.56	477.53	5.91	5.75	-1.37	
5079.00	90.66	0.41	4730.22	509.53	-0.41	509.53	5.84	5.78	0.84	
5111.00	92.59	1.81	4729.32	541.51	0.21	541.51	7.45	6.03	4.37	
5143.00	92.77	2.08	4727.82	573.46	1.30	573.46	1.01	0.56	0.84	
5174.00	92.07	1.64	4726.51	604.41	2.30	604.42	2.67	-2.26	-1.42	
5206.00	92.33	1.20	4725.28	636.38	3.09	636.38	1.60	0.81	-1.37	
5238.00	91.19	1.11	4724.30	668.36	3.74	668.36	3.57	-3.56	-0.28	
5270.00	91.01	0.58	4723.69	700.35	4.21	700.36	1.75	-0.56	-1.66	
5302.00	91.19	0.85	4723.07	732.34	4.61	732.35	1.01	0.56	0.84	
5334.00	90.84	0.41	4722.51	764.33	4.96	764.34	1.76	-1.09	-1.37	
5365.00	89.60	359.35	4722.39	795.33	4.90	795.34	5.26	-4.00	-3.42	

PathFinder Survey Report

Company: EOG Resources
 Field: Thames Field
 Site: Rio Grande 23 Federal #1
 Well: Sec. 23 T16-S R24-E
 Wellpath: Original Hole

Date: 10/25/2005 Time: 16:14:03 Page: 2
 Co-ordinate(NE) Reference: Site: Rio Grande 23 Federal #1
 Vertical (TVD) Reference: SITE 0.0
 Section (VS) Reference: Well (0.00N,0.00E,0.16Azi)
 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: PathFinder ST Surveys

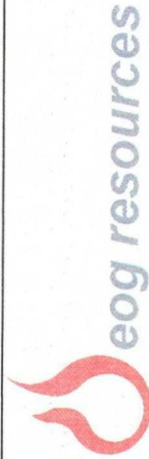
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
5397.00	88.99	358.39	4722.78	827.32	4.26	827.33	3.55	-1.91	-3.00	
5429.00	89.69	359.09	4723.15	859.31	3.56	859.32	3.09	2.19	2.19	
5492.00	90.31	359.26	4723.15	922.30	2.65	922.31	1.02	0.98	0.27	
5556.00	92.51	359.09	4721.57	986.27	1.73	986.27	3.45	3.44	-0.27	
5619.00	92.68	359.35	4718.72	1049.20	0.88	1049.20	0.49	0.27	0.41	
5683.00	92.95	359.00	4715.58	1113.12	-0.04	1113.11	0.69	0.42	-0.55	
5747.00	91.28	357.86	4713.22	1177.05	-1.80	1177.04	3.16	-2.61	-1.78	
5810.00	91.01	358.74	4711.96	1240.01	-3.67	1239.99	1.46	-0.43	1.40	
5873.00	91.98	359.61	4710.31	1302.98	-4.57	1302.96	2.07	1.54	1.38	
5936.00	87.23	358.91	4710.75	1365.95	-5.39	1365.93	7.62	-7.54	-1.11	
5999.00	88.55	359.35	4713.07	1428.90	-6.34	1428.88	2.21	2.10	0.70	
6063.00	88.72	359.35	4714.59	1492.88	-7.07	1492.85	0.27	0.27	0.00	
6126.00	89.25	0.49	4715.71	1555.87	-7.15	1555.84	2.00	0.84	1.81	
6190.00	89.25	0.85	4716.55	1619.86	-6.41	1619.83	0.56	0.00	0.56	
6253.00	90.13	1.46	4716.89	1682.84	-5.14	1682.82	1.70	1.40	0.97	
6317.00	89.25	0.76	4717.23	1746.83	-3.90	1746.81	1.76	-1.37	-1.09	
6381.00	89.52	1.11	4717.92	1810.82	-2.85	1810.80	0.69	0.42	0.55	
6443.00	90.75	1.55	4717.77	1872.80	-1.41	1872.79	2.11	1.98	0.71	
6506.00	90.48	1.46	4717.10	1935.77	0.24	1935.77	0.45	-0.43	-0.14	
6570.00	91.28	2.25	4716.11	1999.73	2.31	1999.73	1.76	1.25	1.23	
6633.00	90.22	1.50	4715.29	2062.69	4.37	2062.69	2.06	-1.68	-1.19	
6697.00	89.08	0.53	4715.68	2126.68	5.51	2126.68	2.34	-1.78	-1.52	
6759.00	89.34	359.56	4716.54	2188.67	5.56	2188.68	1.62	0.42	-1.56	
6823.00	89.43	359.74	4717.22	2252.67	5.16	2252.67	0.31	0.14	0.28	
6886.00	90.66	359.92	4717.17	2315.66	4.98	2315.67	1.97	1.95	0.29	
6950.00	91.71	0.62	4715.85	2379.65	5.28	2379.65	1.97	1.64	1.09	

Annotation

MD ft	TVD ft	
4200.00	4199.59	Tie-In to SDI Gyro
4248.00	4247.57	Begin PathFinder MWD Surveys
4692.00	4632.78	Tie-In for ST1

760' FEL
 5
 765

S.L.
 660' FSL & 760' FEL
 2380' N
 + 660
 3040' FSL
 - 2460
 580' into the
 NE 1/4 of Sec. 23
 2460
 550
 1910' FNL



Rio Grande "23" Federal #1H Section 23, T16-S, R 24-E, N.M.P.M. Eddy County, New Mexico Final Plot

COMPANY DETAILS

EOG Resources
4000 N. Big Spring, Ste. 500
Midland, TX 79705

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



LEGEND

Proposed Slidetrack Plan
Rio Grande 23 Federal #1, Sec. 23 T16-S R24-E, Original Hole
Pathfinder ST Surveys

WELLPATH DETAILS

Original Hole			
Rig:	McVay #4		
Ref. Datum:	SITE	0.00ft	
V. Section Angle	Origin +N/S	Origin +E/W	Starting From TVD
0.16°	0.00	0.00	0.00

SITE DETAILS

Rio Grande 23 Federal #1
Section 23, T16-S, R24-E
Site Centre Northing: 692274.00
Easting: 432662.00
Ground Level: 3633.00
Positional Uncertainty: 0.00m
Convergence: -0.12

ANNOTATIONS

No.	TVD	MD	Annotation
1	4199.59	4200.00	Tie-In to SDI Gyro
2	4247.57	4248.00	Begin Pathfinder MWD Surveys
3	4632.78	4692.00	Tie-In for ST1
4	4717.17	6886.00	Tie-In for ST2

WELL DETAILS

Name	+N/S	+E/W	Northing	Easting	Latitude	Longitude	Slot
Sec. 23 T16-S R24-E	0.00	0.00	692274.00	432662.00	32°54'10.61"N	104°33'09.84"W	N/A

