

SCANNED



DIRECTIONAL SURVEY REPORT

EOG RESOURCES

RED HILLS NORTH UNIT #706 #1

LEA COUNTY, NEW MEXICO

PREPARED BY: ROCK BRUNET

PathFinder Energy Services, Inc.
3329 West Pinhook Road, Lafayette, LA 70508
(337) 233-3982

November 7, 2003

EOG RESOURCES, INC.
4000 N. Big Springs Ste. 500
Midland, TX 79702

Attn: Craig Young

RE: EOG RESOURCES
RED HILLS NORTH UNIT #706 #1
LEA COUNTY, NEW MEXICO
RIG: MCVAY #7
FILENAME: J-WT-0309-0050

Dear Sir:

We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

SURVEY DATA

- 1 - Original survey report
- 2 – Survey report copies

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (337) 233-3982.

Sincerely,



Rock Brunet
Service Coordinator
PathFinder Energy Services

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY: A) LEWIS ROBINSON
B) ROGER FEDERWISCH
3. POSITION OF SAID PERSON(S): (A-B) SURVEYORS (FIELD ENGINEER)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 09/02/03 TO 09/24/03
5. STATE IN WHICH SURVEY WAS PERFORMED: ONSHORE, WYOMING
6. LOCATION OF WELL: LEA COUNTY, NEW MEXICO
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

EOG RESOURCES
RED HILLS NORTH UNIT #706 #1
LEA COUNTY, NEW MEXICO
RIG: MCVAY #7
9. SURVEY CERTIFIED FROM: 11,878 TO 12,297 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 204.49 FEET ON A BEARING OF 231.90 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT SURVEY DEPTH OF 12,297 FEET ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



ROCK BRUNET
SERVICE COORDINATOR

Pathfinder

BHL Report

Page 1

Job No: J-WT-0309-0050

Date: 11/5/2003

Time: 1:57 pm

Wellpath ID: RED HILLS NORTH UNIT #706

Date Created: 9/19/2003

Last Revision: 9/28/2003

Calculated using the Minimum Curvature Method

Computed using PDS VER2.2.6

Vertical Section Plane: 253.96 deg.

Survey Reference: WELLHEAD
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

EOG RESOURCES
RED HILLS NORTH UNIT #706
LEA COUNTY, TEXAS
RIG: McVAY #7

DECL: 8.02^ EAST TO GRID
KBH = 16 FEET ROTARY TO GROUND

PATHFINDER SUPERVISOR:
GLENN COYLE
PATHFINDER FIELD ENGINEERS:
ROGER FEDERWISCH / LEWIS ROBINSON

Measured Depth	12297.00	(ft)
Inclination	59.97	(deg)
Azimuth	263.34	(deg)
True Vertical Depth	12208.26	(ft)
Vertical Section	189.52	(ft)
Rectangular Offsets		
North/South	126.18 S	(ft)
East/West	160.92W	(ft)
Closure Dist & Dir	204.49@231.90	(deg)
Dogleg Severity	12.50	(deg/100ft)
Build Rate	11.72	(deg/100ft)
Walk Rate	-5.14	(deg/100ft)

Pathfinder

Survey Report

Page 1

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Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	T O T A L		Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
						Rectangular (ft)	Offsets (ft)			
TIE IN TO SCIENTIFIC GYRO SURVEY AT 11800 MD										
11800.00	3.13	278.07	11797.05	0.00	-45.54	79.84 S	70.34 E	106.41@	138.62	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS										
11878.00	6.86	241.99	11874.76	78.00	-39.04	81.73 S	64.12 E	103.88@	141.89	6.03
11915.00	14.68	245.15	11911.08	37.00	-32.23	84.74 S	57.90 E	102.63@	145.66	21.19
11944.00	19.79	248.31	11938.77	29.00	-23.71	88.10 S	50.00 E	101.30@	150.42	17.91
11979.00	23.21	246.03	11971.33	35.00	-10.98	93.10 S	38.19 E	100.62@	157.70	10.06
12011.00	26.29	248.23	12000.38	32.00	2.32	98.29 S	25.84 E	101.63@	165.27	10.04
12042.00	28.58	250.69	12027.90	31.00	16.56	103.29 S	12.47 E	104.04@	173.12	8.24
12073.00	31.83	253.94	12054.69	31.00	32.14	108.00 S	2.39W	108.03@	181.27	11.73
12105.00	35.53	258.16	12081.31	32.00	49.86	112.25 S	19.61W	113.95@	189.91	13.68
12136.00	39.75	262.55	12105.86	31.00	68.66	115.38 S	38.27W	121.56@	198.35	16.12
12168.00	43.70	265.45	12129.74	32.00	89.62	117.59 S	59.44W	131.76@	206.82	13.74
12199.00	48.80	265.80	12151.17	31.00	111.54	119.29 S	81.76W	144.62@	214.43	16.47
12231.00	52.32	265.54	12171.50	32.00	135.73	121.16 S	106.40W	161.25@	221.29	11.02
12261.00	55.75	265.19	12189.11	30.00	159.53	123.12 S	130.60W	179.48@	226.69	11.47
12297.00	59.97	263.34	12208.26	36.00	189.52	126.18 S	160.92W	204.49@	231.90	12.50