

(August 1999)

Oil Cons. UNITED STATES

*REVISED items 24, 26, 27

FORM APPROVED
OMB NO. 1004-0137
Expires: November 30, 2000

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WELL COMPLETION OR RECOMPLETION REPORT AND LOG
Artesia, NM 88210

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other _____

2. Name of Operator **Robert Elliott**
Devon Energy Production Company, L.P. **Operations Engr Advisor**

3. Address **20 N. Broadway, suite 1500, OKC, OK 73102**
3a Phone No. (Include area code) **(405)228-8609**

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At Surface 810' FSL & 350' FEL, Unit P, Section 8-T22S-R24E, Eddy Cnty, NM

At top prod. interval reported below 886' FSL & 793' FEL, Unit 9, Section 8-T22S-R24E

At total depth 908' FSL & 834' FEL, Unit P, Section 8-T22S-R24E

14. Date Spudded

06/08/2003

15. Date T.D. Reached

07/04/2003

16. Date Completed
☐ D & A ☒ Ready to Prod.

07/31/2003

18. Total Depth: MD 8520'
TVD 8478'

19. Plug Back T.D.: MD 8413'
TVD 8455'

20. Depth Bridge Plug Set: MD
TVD

21. Type of Electric & Other Mechanical Logs Run (Submit copy of each)
Platform Express Three Detector Litho-Density Compensated Neutron/NGT,
Hi-Res Laterolog Array MCFL/NGT and Cement Bond logs

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ 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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12 1/4"	9 5/8" K55	36#	surface	1581'		item 32		surface	
8 3/4"	7" J55 & HCL-80	23#	surface	8502'	2996', 7886'	see item 32		115' CBL	

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 7/8" *	EOM @ 8311'							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Cisco Reef	7988'	8299'	*8010-8227'	.41" EHD	206 *	open
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval ***8010-8227'** Amount and Type of Material ***19,400 gals 20% HCl + 206 BS**

ACCEPTED FOR RECORD

MAY 28 2004

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
8-1-03	8-12-03	24	→	493	672	2225	40 degs		ESP TD3000 downhole pumps
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
			→	493	672	2225	1363/1	Producing	

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. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)

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	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	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	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	Producing

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

sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones or 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
Cisco Reef	7988'	8299'	gas, oil, water	Glorietta/Yeso Bone Spring 3rd Bone Spring Wolfcamp Upper Penn Cisco Reef TD	2544' 3168' 6821' 7287' 7654' 7988' 8520'

32. Additional remarks (include plugging procedure):

Cemented 9 5/8" casing: 401 sx 35/65 Poz C with yield 1.99 cf + 400 sx Class C with yield 1.32 cf.

Cemented 7" casing: 1st stage= 150 sx 15-61-11 Pozmix C, yield 1.59 cf; 2nd stage= 1000 sx 60-40 Pozmix C, yield 1.34 cf, + 50 sx Class H, yield 1.52 cf; 3rd stage= 475 sx 60-40 Pozmix C, yield 1.37 cf + 75 sx Class H, yield 1.52 cf.

33. Circle enclosed attachments:

0. Electrical/Mechanical Logs (1 full set req'd.) 2. Geological Report 3. DST Report 4. Directional Survey
5. Sundry Notice for plugging and cement verification 6. Core Analysis 0. Other-Deviation Survey

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) Candace R. Graham 405/235-3611 X4520

Title candi.graham@dvn.com /Operations Tech II

Signature Candace R. Graham

Date 05/26/2004

Title 18 U.S.C. Section 101 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 and false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

WELL NAME AND NUMBER Old Ranch Knoll 8 No.9

LOCATION Section 8, T22S, R24E, 810'FSL, 350'FEL, Eddy County

OPERATOR Devon Energy Production Company, L.P.

DRILLING CONTRACTOR United Drilling, Inc.

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and had conducted deviation tests and obtained the following results:

Degrees @ Depth

3/4° @ 610'

1° @ 1012'

1-1/2° @ 1600'

Degrees @ Depth

Degrees @ Depth

RECEIVED

JUN 03 2004

ODD-ARTESIA

Drilling Contractor United Drilling, Inc.

By: George A. Aho

George Aho

Title: Business Manager

Subscribed and sworn to before me this 18th day of June,
2003.

Carlene Martin

Notary Public - Carlene Martin

My Commission Expires: 10-04-04

Chaves
County

New Mexico
State

#X9

(Give Unit, Section, Township and Range)

OKLAHOMA CITY, OK 73102-8260

NABORS DRILLING USA, LP

DEGREES @ DEPTH DEGREES @ DEPTH DEGREES @ DEPTH DEGREES @ DEPTH

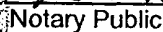
1 3/4 5507

OOD-ARTESIA

Nabors Drilling USA, L.P.

Don Nelson-District Drilling Superintendent

Subscribed and sworn to before me this 26th day of August, 2003

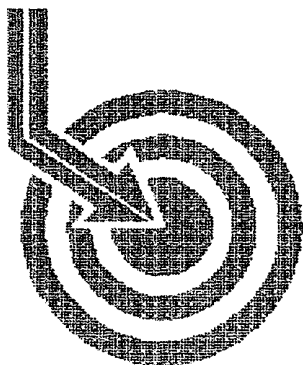


My Commision

MIDLAND

County

TEXAS



Scientific Drilling

DEVON ENERGY

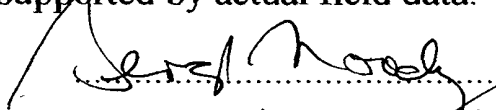
Field: Indian Basin
Site: Eddy County, NM
Well: Old Ranch Knoll 8 Fed. #9
Wellpath: VH - Job #32K0603331
Survey: 06/28/03

RECEIVED

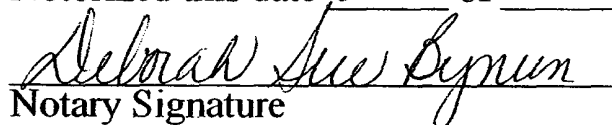
JUN 03 2004

OCB-ARTESIA

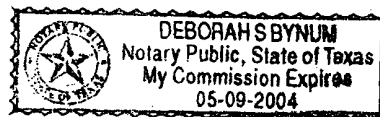
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....Company Representative

Notorized this date 21st of July, 2003.



Notary Signature
County of Midland
State of Texas



Scientific Drilling Survey Report

Company: DEVON ENERGY	Date: 7/21/2003	Time: 15:13:58	Page: 1
Field: Indian Basin	Co-ordinate(N/E) Reference:	Site: Eddy County, NM, True North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Old Ranch Knoll 8 Fed. #9	Section (VS) Reference:	Well (0.00N,0.00E,264.54Azi)	
Wellpath: VH - Job #32K0603331	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 06/28/03	Start Date: 6/28/2003
Company: Scientific Drilling	Engineer: Cary Coffee
Tool: Keeper, Keeper Gyro	Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	1.64	35.81	100.0	-0.9	1.2	0.8	1.64	1.4	35.81
200.0	4.85	74.89	199.8	-6.1	3.4	5.8	3.72	6.7	59.26
300.0	4.49	111.57	299.5	-13.7	3.1	13.5	2.96	13.8	77.10
400.0	1.37	176.14	399.4	-17.2	0.5	17.2	4.09	17.2	88.49
500.0	0.69	195.44	499.4	-16.9	-1.3	17.1	0.75	17.2	94.40
600.0	0.59	233.75	599.4	-16.3	-2.2	16.5	0.43	16.7	97.58
700.0	1.61	187.16	699.3	-15.5	-3.9	16.0	1.28	16.4	103.73
800.0	0.47	267.72	799.3	-14.8	-5.3	15.4	1.60	16.3	109.04
900.0	0.88	272.59	899.3	-13.6	-5.3	14.2	0.42	15.1	110.43
1000.0	0.72	288.35	999.3	-12.3	-5.1	12.8	0.27	13.8	111.50
1100.0	0.62	300.33	1099.3	-11.3	-4.6	11.8	0.17	12.6	111.28
1200.0	1.24	296.27	1199.3	-9.9	-3.8	10.3	0.62	11.0	110.36
1300.0	1.92	297.48	1299.3	-7.6	-2.6	7.9	0.68	8.3	108.15
1400.0	1.62	309.50	1399.2	-5.2	-0.9	5.3	0.47	5.4	99.75
1500.0	2.04	300.95	1499.2	-2.8	0.9	2.7	0.50	2.8	71.32
1600.0	1.73	299.89	1599.1	-0.1	2.6	-0.2	0.32	2.6	356.57
1700.0	1.72	299.78	1699.1	2.4	4.1	-2.8	0.01	4.9	325.84
1800.0	1.71	298.39	1799.0	4.8	5.5	-5.4	0.04	7.7	315.78
1900.0	1.69	296.30	1899.0	7.3	6.9	-8.0	0.07	10.6	310.69
2000.0	1.57	285.03	1998.9	9.9	7.9	-10.7	0.34	13.3	306.54
2100.0	1.72	292.24	2098.9	12.5	8.8	-13.4	0.25	16.0	303.42
2200.0	1.56	290.00	2198.8	15.0	9.9	-16.0	0.17	18.8	301.57
2300.0	1.16	285.13	2298.8	17.2	10.6	-18.3	0.42	21.1	300.05
2400.0	1.30	277.23	2398.8	19.3	11.0	-20.4	0.22	23.2	298.32
2500.0	0.99	270.21	2498.8	21.2	11.1	-22.4	0.34	25.0	296.45
2600.0	0.86	261.46	2598.8	22.8	11.0	-24.0	0.19	26.4	294.68
2700.0	1.01	259.40	2698.7	24.5	10.8	-25.6	0.15	27.8	292.78
2800.0	0.89	255.64	2798.7	26.1	10.4	-27.2	0.13	29.1	290.91
2900.0	0.93	252.32	2898.7	27.7	10.0	-28.8	0.07	30.4	289.11
3000.0	0.65	240.67	2998.7	29.0	9.4	-30.0	0.32	31.5	287.45
3100.0	1.15	229.81	3098.7	30.3	8.5	-31.3	0.52	32.4	285.22
3200.0	0.93	236.61	3198.7	31.9	7.4	-32.7	0.25	33.6	282.77
3300.0	0.95	226.63	3298.7	33.2	6.4	-34.0	0.16	34.6	280.66
3400.0	1.32	215.12	3398.7	34.6	4.9	-35.3	0.43	35.6	277.90
3500.0	1.11	237.66	3498.6	36.3	3.4	-36.7	0.52	36.9	275.34
3600.0	1.18	225.74	3598.6	37.9	2.2	-38.3	0.25	38.4	273.28
3700.0	1.07	228.99	3698.6	39.5	0.9	-39.7	0.13	39.8	271.25
3800.0	0.95	226.98	3798.6	40.9	-0.3	-41.1	0.12	41.1	269.56
3900.0	0.88	236.21	3898.6	42.2	-1.3	-42.3	0.16	42.3	268.23
4000.0	0.93	237.80	3998.5	43.6	-2.2	-43.6	0.05	43.7	267.16
4100.0	1.11	233.65	4098.5	45.2	-3.2	-45.1	0.19	45.2	265.97
4200.0	0.90	233.93	4198.5	46.7	-4.2	-46.5	0.21	46.7	264.83
4300.0	1.13	266.00	4298.5	48.4	-4.7	-48.1	0.61	48.4	264.37
4400.0	1.14	269.67	4398.5	50.3	-4.8	-50.1	0.07	50.3	264.51
4500.0	1.39	272.08	4498.5	52.5	-4.8	-52.3	0.25	52.5	264.78
4600.0	1.14	278.47	4598.4	54.7	-4.6	-54.5	0.28	54.7	265.19
4700.0	1.20	263.82	4698.4	56.7	-4.6	-56.5	0.30	56.7	265.39
4800.0	1.18	268.67	4798.4	58.8	-4.7	-58.6	0.10	58.8	265.42

Scientific Drilling Survey Report

Company: DEVON ENERGY
Field: Indian Basin
Site: Eddy County, NM
Well: Old Ranch Knoll 8 Fed. #9
Wellpath: VH - Job #32K0603331

Date: 7/21/2003 **Time:** 15:13:58 **Page:** 2
Co-ordinate(NE) Reference: Site: Eddy County, NM, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,264.54Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

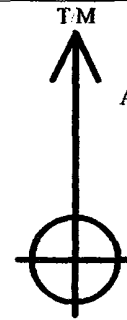
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.0	1.06	262.11	4898.4	60.7	-4.8	-60.6	0.18	60.7	265.43
5000.0	0.92	256.29	4998.4	62.5	-5.2	-62.2	0.17	62.5	265.26
5100.0	1.03	253.37	5098.3	64.1	-5.6	-63.9	0.12	64.1	264.98
5200.0	2.82	219.51	5198.3	66.8	-7.8	-66.3	2.05	66.8	263.32
5300.0	1.09	266.93	5298.2	69.4	-9.7	-68.8	2.24	69.5	261.97
5400.0	1.35	275.40	5398.2	71.5	-9.7	-70.9	0.32	71.6	262.25
5500.0	1.82	280.31	5498.2	74.2	-9.3	-73.7	0.49	74.3	262.84
5600.0	1.50	274.15	5598.1	77.0	-8.9	-76.5	0.36	77.1	263.38
5700.0	1.66	270.47	5698.1	79.8	-8.8	-79.3	0.19	79.8	263.69
5800.0	1.97	280.06	5798.0	82.9	-8.5	-82.4	0.43	82.9	264.14
5854.0	1.31	297.45	5852.0	84.3	-8.0	-83.9	1.52	84.3	264.54



Scientific
Drilling

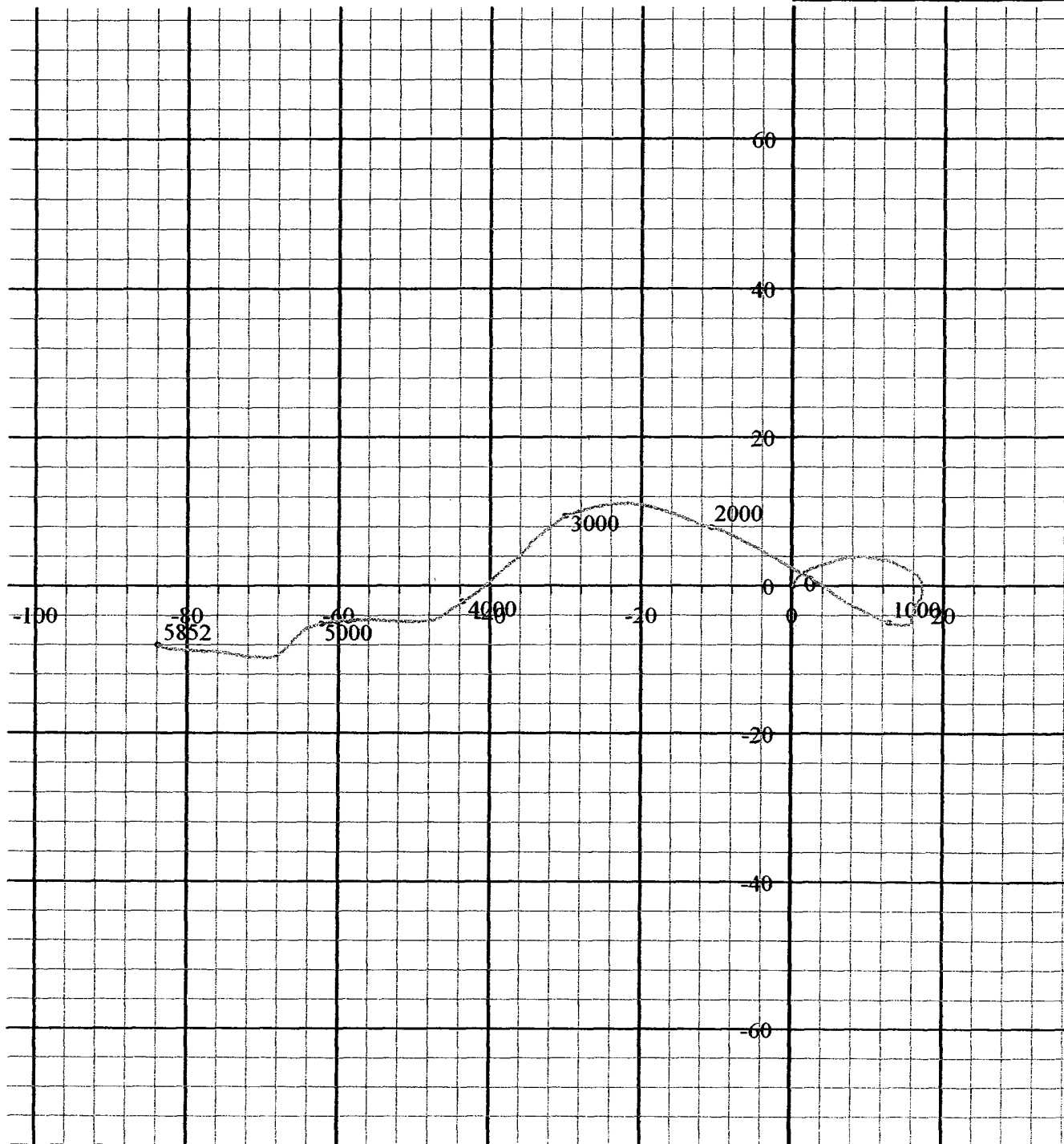
Field: Indian Basin
Site: Eddy County, NM
Well: Old Ranch Knoll 8 Fed. #9
Wellpath: VH - Job #32K0603331
Survey: 06/28/03



Azimuths to True North
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 7/21/2003
Model: Wmm_95

South(-)/North(+) [20ft/in]



West(-)/East(+) [20ft/in]

Deviation Summary

Legal Well Name:				OLD RANCH KNOLL 8 FED COM 9		Spud Date: 6/8/2003				S/T #	V.S. AZI (°)
Common Well Name:				OLD RANCH KNOLL 8 FED COM 9		Start: 5/22/2003				OH	275.57
Event Name:				ONSHORE ORIG DRLG		End: 8/12/2003					
Contractor Name:				NABORS DRILLING		Rig Release: 7/7/2003					
Rig Name:				NABORS		Rig Number: 347					
TMD: 8,520.00 (ft)				TVD: 8,477.76 (ft)		Calculation Method: Minimum Curvature					
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
OH	0.00	0.00	0.00	NYN	0.00	0.00	0.00	0.00	0.00	0.00	
OH	610.00	0.75	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	1,012.00	1.00	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	1,600.00	1.50	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	1,864.00	1.75	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	2,368.00	1.00	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	2,967.00	1.00	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	3,470.00	1.25	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	3,971.00	0.75	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	4,506.00	1.00	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	5,007.00	1.25	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	5,509.00	1.75	0.00	NNN	0.00	0.00	0.00	0.00	0.00	0.00	INC
OH	5,800.00	1.97	280.47	NNN	0.00	0.00	0.00	0.00	0.00	0.00	GMS
OH	5,854.00	1.31	297.45	NYN	5,852.01	-8.01	-83.90	82.73	1.51	-1.22	GMS
OH	5,907.00	2.10	289.40	YNN	5,904.98	-7.40	-85.35	84.23	1.55	1.49	MWD
OH	5,970.00	1.90	286.10	YNN	5,967.95	-6.73	-87.45	86.38	0.37	-0.32	MWD
OH	6,002.00	2.00	286.60	YNN	5,999.93	-6.43	-88.49	87.45	0.32	0.31	MWD
OH	6,033.00	1.90	285.90	YNN	6,030.91	-6.13	-89.50	88.49	0.33	-0.32	MWD
OH	6,096.00	3.50	283.80	YNN	6,093.84	-5.39	-92.38	91.42	2.54	2.54	MWD
OH	6,128.00	3.50	286.00	YNN	6,125.78	-4.88	-94.26	93.34	0.42	0.00	MWD
OH	6,192.00	4.90	284.70	YNN	6,189.60	-3.65	-98.79	97.96	2.19	2.19	MWD
OH	6,255.00	4.40	290.40	YNN	6,252.40	-2.13	-103.65	102.96	1.08	-0.79	MWD
OH	6,319.00	5.80	284.80	YNN	6,316.14	-0.44	-109.08	108.52	2.32	2.19	MWD
OH	6,382.00	7.00	278.30	YNN	6,378.75	0.92	-115.96	115.50	2.22	1.90	MWD
OH	6,413.00	6.80	277.30	YNN	6,409.52	1.43	-119.65	119.22	0.75	-0.65	MWD
OH	6,476.00	7.20	278.50	YNN	6,472.06	2.49	-127.25	126.89	0.68	0.63	MWD
OH	6,538.00	8.60	282.30	YNN	6,533.47	4.05	-135.62	135.38	2.41	2.26	MWD
OH	6,601.00	9.00	286.40	YNN	6,595.72	6.44	-144.95	144.89	1.18	0.63	MWD

Deviation Summary

Legal Well Name:	OLD RANCH KNOLL 8 FED COM 9	Spud Date:	6/8/2003	S/T #	V.S. AZI (°)
Common Well Name:	OLD RANCH KNOLL 8 FED COM 9	Start:	5/22/2003	OH	275.57
Event Name:	ONSHORE ORIG DRLG	End:	8/12/2003		
Contractor Name:	NABORS DRILLING	Rig Release:	7/7/2003		
Rig Name:	NABORS	Rig Number:	347		
TMD: 8,520.00 (ft)	TVD: 8,477.76 (ft)	Calculation Method:	Minimum Curvature		

S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
OH	6,664.00	10.00	283.90	YNN	6,657.86	9.15	-154.99	155.15	1.72	1.59	MWD
OH	6,728.00	11.00	281.70	YNN	6,720.79	11.72	-166.36	166.72	1.68	1.56	MWD
OH	6,790.00	11.80	278.00	YNN	6,781.56	13.80	-178.43	178.93	1.75	1.29	MWD
OH	6,822.00	11.70	277.80	YNN	6,812.89	14.70	-184.89	185.44	0.34	-0.31	MWD
OH	6,885.00	13.20	284.69	YNN	6,874.41	17.39	-198.18	198.93	3.35	2.38	MWD
OH	6,916.00	13.30	280.30	YNN	6,904.59	18.93	-205.11	205.98	3.26	0.32	MWD
OH	6,979.00	14.80	281.00	YNN	6,965.70	21.76	-220.14	221.21	2.40	2.38	MWD
OH	7,042.00	16.50	280.30	YNN	7,026.37	24.89	-236.84	238.14	2.71	2.70	MWD
OH	7,074.00	16.60	278.30	YNN	7,057.04	26.37	-245.83	247.23	1.81	0.31	MWD
OH	7,106.00	16.20	278.30	YNN	7,087.74	27.67	-254.78	256.26	1.25	-1.25	MWD
OH	7,137.00	16.00	279.70	YNN	7,117.52	29.01	-263.27	264.84	1.41	-0.65	MWD
OH	7,168.00	15.70	279.30	YNN	7,147.34	30.41	-271.62	273.29	1.03	-0.97	MWD
OH	7,200.00	15.90	279.10	YNN	7,178.14	31.80	-280.22	281.98	0.65	0.63	MWD
OH	7,231.00	15.00	279.00	YNN	7,208.01	33.10	-288.37	290.22	2.90	-2.90	MWD
OH	7,263.00	14.70	278.90	YNN	7,238.95	34.38	-296.47	298.41	0.94	-0.94	MWD
OH	7,294.00	14.10	280.20	YNN	7,268.97	35.66	-304.08	306.10	2.20	-1.94	MWD
OH	7,326.00	13.80	280.70	YNN	7,300.03	37.06	-311.66	313.79	1.01	-0.94	MWD
OH	7,357.00	14.50	282.60	YNN	7,330.09	38.59	-319.08	321.32	2.71	2.26	MWD
OH	7,388.00	13.80	283.50	YNN	7,360.15	40.30	-326.47	328.84	2.37	-2.26	MWD
OH	7,425.00	12.20	283.90	YNN	7,396.20	42.27	-334.55	337.08	4.33	-4.32	MWD
OH	7,488.00	13.20	279.80	YNN	7,457.66	45.09	-348.10	350.84	2.14	1.59	MWD
OH	7,520.00	13.80	281.70	YNN	7,488.77	46.49	-355.44	358.27	2.33	1.88	MWD
OH	7,582.00	13.10	283.80	YNN	7,549.07	49.66	-369.50	372.58	1.38	-1.13	MWD
OH	7,614.00	12.50	284.50	YNN	7,580.28	51.39	-376.38	379.59	1.94	-1.88	MWD
OH	7,645.00	12.00	285.30	YNN	7,610.57	53.09	-382.74	386.08	1.70	-1.61	MWD
OH	7,708.00	11.30	284.40	YNN	7,672.27	56.35	-395.03	398.64	1.15	-1.11	MWD
OH	7,771.00	10.90	286.20	YNN	7,734.09	59.55	-406.73	410.59	0.84	-0.63	MWD
OH	7,833.00	10.10	289.80	YNN	7,795.06	63.02	-417.47	421.62	1.67	-1.29	MWD

Deviation Summary

Legal Well Name:	OLD RANCH KNOLL 8 FED COM 9	Spud Date:	6/8/2003	S/T #	V.S. AZI (°)
Common Well Name:	OLD RANCH KNOLL 8 FED COM 9	Start:	5/22/2003	OH	275.57
Event Name:	ONSHORE ORIG DRLG	End:	8/12/2003		
Contractor Name:	NABORS DRILLING	Rig Release:	7/7/2003		
Rig Name:	NABORS	Rig Number:	347		
TMD: 8,520.00 (ft)	TVD: 8,477.76 (ft)	Calculation Method: Minimum Curvature			

S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
OH	7,896.00	7.50	294.70	YNN	7,857.31	66.61	-426.41	430.86	4.29	-4.13	MWD
OH	7,959.00	7.00	298.70	YNN	7,919.81	70.17	-433.51	438.28	1.13	-0.79	MWD
OH	7,990.00	6.90	301.30	YNN	7,950.58	72.05	-436.76	441.69	1.06	-0.32	MWD
OH	8,054.00	6.50	301.30	YNN	8,014.14	75.93	-443.14	448.42	0.63	-0.63	MWD
OH	8,148.00	6.00	300.20	YNN	8,107.58	81.16	-451.93	457.68	0.55	-0.53	MWD
OH	8,241.00	6.00	296.90	YNN	8,200.07	85.81	-460.47	466.62	0.37	0.00	MWD
OH	8,369.00	5.60	296.20	YNN	8,327.42	91.59	-472.04	478.70	0.32	-0.31	MWD
OH	8,482.00	5.20	300.40	YNN	8,439.92	96.62	-481.40	488.51	0.50	-0.35	MWD
OH	8,520.00	5.07	301.81	YNN	8,477.76	98.37	-484.31	491.57	0.48	-0.34	MWD