

N.M. Oil Cons. DIV-Dist. 2
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1301 North Grand Avenue
Albuquerque, NM 88210

FORM APPROVED
OMB NO. 1004-0137
EXPIRES: NOVEMBER 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOGS

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NMNM-89051							
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr., ☐ Other		6. If Indian, Allottee or Tribe Name							
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP		7. Unit or CA Agreement Name and No.							
3. Address 20 North Broadway, Ste 1500 Oklahoma City, OK 73102-8260		8. Lease Name and Well No. Apache 13 Federal 8							
3a. Phone No. (include area code) 405-552-8198		9. API Well No. 30-015-34221							
4. Location of Well (Report location clearly and in accordance with Federal requirements) At Surface H 2530' FNL 330 FEL At top prod. interval reported below H 739' FEL & 2420' FNL At total Depth F 2582' FWL & 1878' FNL		10. Field and Pool, or Exploratory Delaware Cherry Canyon							
11. Sec, T., R., M., on Block and Survey or Area 13 22S 30E		12. County or Parish 13. State Eddy New Mexico							
14. Date Spudded 8/19/2005		15. Date T.D. Reached 9/15/2005							
16. Date Completed 11/1/2005 ☒ D & A ☒ Ready to Prod.		17. Elevations (DR, RKB, RT, GL)* 3347'							
18. Total Depth: MD 9,102' TVD		19. Plug Back T.D.: MD 9,050' TVI							
20. Depth Bridge Plug Set: MD TVI		21. Type Electric & Other Mechanical Logs Run (Submit copy of each)							
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit report) Directional Survey? ☐ No ☒ Yes (Submit copy)		23. Casing and Liner Record (Report all strings set in well)							
AIT_MCFL_GR, CNL, GR									
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8" H-40	48#	0	645'		650 sx Cl C, circ 86 sx		0	
12 1/4"	9 5/8" J-55	40#	0	3827'		1425 sx Cl C, circ 355 sx		0	
7 7/8"	5 1/2" P-110	17#	0	9102'		2321 sx Poz H, circ 490 sx			
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"	6294'								
25. Producing Intervals									
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status			
Delaware	8110	8111	8110-8111		6	Producing			
Delaware	8663	8665	8663-8665		6	Producing			
Delaware	7006	7007	7006-7007		3	Producing			
Delaware	7560	7561	7560-7561		3	Producing			
26. Perforation Record									
27. Acid, Fracture, Treatment, Cement Squeeze, Etc.									
Depth Interval		Amount and Type of Material							
8110-8665		Acidize w/2000 gal 7.5% NEFe dropping 30 bio-balls. Frac w/100,000# 16/30 Ottawa & RC sn.							
7006-7561'		Acidize w/2000 gal 7.5% NEFe dropping 30 bio-balls. Frac w/100,000# 16/30 Ottawa & RC sn.							
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
11/1/2005	11/4/2005	24	→	144	38	314			Pumping
Choke Size	Tbg. Press. Flwg SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
0	0	→	→	144	38	314	264	Producing	
28a. 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)

ACCEPTED FOR RECORD
NOV 14 2005
GARY GOURLEY
PETROLEUM ENGINEER

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	
			→						

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

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

Sold

Summary of Porous Zones (Include Aquifers):

Show all important zones of 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
				Rustler Salado Base Salt Delaware	438' 735' 3598' 3860'

Additional remarks (include plugging procedure):

09/22/05 MIRU PU. RIH w/bit, DC's, & 2 7/8" tbg to DV @ 4020'.

09/23/05 Drill out DV tools & RIH to PBTD @ 9050'. Circ hole w/2% KCl & test to 3000 psi. POOH.

09/26/05 RIH w/TCP guns on 2 7/8" tbg & perf 6 shots @ 8110' - 8111' & 8663' - 8665'; (6 SPF) 12 holes. TIH w/pkr @ 7980'.

09/27/05 Acidize w/3000 gal 7.5% NEFe dropping 30 bio-balls. TOOH w/pkr & tbg.

09/29/05 Frac 8110' - 8111' & 8663' - 8681' w/100,000# 16/30 Ottawa & RC.

09/30/05 RIH w/tbg & clean out sand. POOH.

10/03/05 Run sub pump to 6325'.

10/20/05 POOH w/tbg & sub pump.

10/23/05 Set composite BP @ 7893' & tested to 2000 psi. Displ hole w/2% KCl.

10/24/05 RIH w/TCP guns on 2 7/8" tbg & perf 3 shots @ 7560' - 7561' & 3 shots @ 7006' - 7007'; (3SPF) 6 holes. POOH w/tbg, RIH w/pkr above perfs.

10/25/05 Acidize w/2000 gal 7.5% NEFe dropping 30 bio-balls. POOH w/tbg.

10/27/05 Frac down csg w/100,000# 16/30 Ottawa & RC.

10/30/05 RIH w/bit & tbg & clean out sand & drilled out composite BP. POOH.

11/01/05 RIH w/pump & rods. Put well on production.

Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd)

2. Geologic Report

3. DST Report

4. Directional Survey

5. Sundry Notice for plugging and cement verification

6. Core Analysis

7. Other

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) Stephanie A. YsasagaTitle Senior Engineering TechnicianSignature [Signature]Date 11/8/2005

18 U.S.C Section 1001 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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Scientific Drilling

Scientific Drilling International, Inc.

2034 Trade Drive • Midland, Texas 79703

P. O. Box 9699 • Midland, Texas 79708

Tel: 432-563-1339 • Fax: 432-697-0324

23 September 2005

**Devon Energy
20 N. Broadway, Suite #1500
Oklahoma City, OK 73102**

Subject: Apache 13 Fed #8H

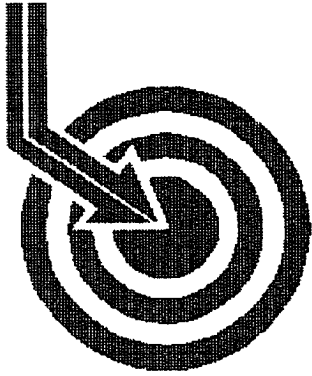
To Whom It May Concern:

Enclosed are two notarized surveys of the above referenced well, for your records and/or New Mexico OCD. If you have any questions, please let me know.

Regards,

Becky Wharton

Enclosures



Scientific Drilling

DEVON ENERGY

Field: Delaware
Site: Eddy County, NM
Well: Apache 13 Fed #8H
Wellpath: VH - Job #32K0905650
Survey: 09/01/05

RECEIVED

NOV 16 2005

OOD-ARTBIA

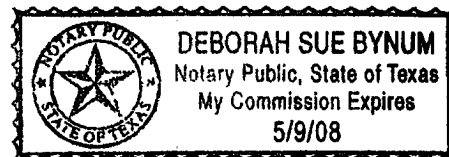
This survey is correct to the best of my knowledge
and is supported by actual field data.

[Signature] Company Representative

Notorized this date 24th of September, 2005.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: DEVON ENERGY	Date: 9/23/2005	Time: 09:16:19	Page: 1
Field: Delaware	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Apache 13 Fed #8H	Section (VS) Reference:	Well (0.00N,0.00E,284.93Azi)	
Wellpath: VH - Job #32K0905650	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 09/01/05 KSRG 0'-3808'	Start Date: 9/1/2005
Company: Scientific Drilling Internatio	Engineer: Foster w/P&M
Tool: Keeper;Keeper Gyro	Tied-to: From Surface

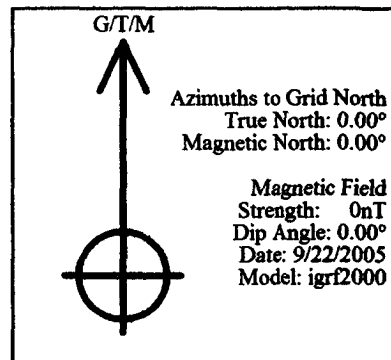
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.35	227.69	100.00	0.17	-0.21	-0.23	0.35	0.31	227.69
200.00	0.34	232.53	200.00	0.51	-0.59	-0.69	0.03	0.91	229.27
300.00	0.19	260.58	300.00	0.84	-0.80	-1.09	0.19	1.35	233.65
400.00	0.24	70.05	400.00	0.82	-0.76	-1.05	0.43	1.30	234.36
500.00	0.51	85.88	499.99	0.23	-0.65	-0.41	0.29	0.77	212.32
600.00	0.71	101.65	599.99	-0.81	-0.74	0.64	0.26	0.98	139.39
700.00	0.90	111.79	699.98	-2.21	-1.16	1.97	0.24	2.29	120.46
800.00	0.84	107.44	799.97	-3.72	-1.67	3.40	0.09	3.79	116.17
900.00	0.88	106.91	899.96	-5.22	-2.12	4.84	0.04	5.28	113.62
1000.00	0.88	107.86	999.94	-6.75	-2.57	6.30	0.01	6.81	112.22
1100.00	0.87	108.49	1099.93	-8.28	-3.05	7.75	0.01	8.33	111.48
1200.00	0.88	108.80	1199.92	-9.80	-3.54	9.20	0.01	9.86	111.04
1300.00	0.89	106.99	1299.91	-11.34	-4.01	10.67	0.03	11.40	110.61
1400.00	0.92	109.13	1399.90	-12.92	-4.50	12.17	0.05	12.98	110.30
1500.00	0.99	106.60	1499.88	-14.59	-5.01	13.76	0.08	14.64	110.02
1600.00	1.06	110.07	1599.87	-16.37	-5.58	15.45	0.09	16.43	109.84
1700.00	1.13	106.84	1699.85	-18.28	-6.18	17.27	0.09	18.34	109.69
1800.00	1.02	108.46	1799.83	-20.15	-6.75	19.06	0.11	20.21	109.50
1900.00	1.23	113.52	1899.81	-22.10	-7.46	20.88	0.23	22.18	109.65
2000.00	1.23	114.39	1999.79	-24.22	-8.33	22.85	0.02	24.32	110.03
2100.00	1.18	112.49	2099.77	-26.30	-9.17	24.77	0.06	26.42	110.31
2200.00	1.18	112.03	2199.74	-28.34	-9.95	26.68	0.01	28.47	110.45
2300.00	1.12	114.77	2299.72	-30.33	-10.74	28.52	0.08	30.48	110.64
2400.00	1.08	117.44	2399.71	-32.21	-11.59	30.25	0.07	32.39	110.96
2500.00	1.10	115.18	2499.69	-34.07	-12.43	31.95	0.05	34.28	111.26
2600.00	1.10	114.56	2599.67	-35.97	-13.24	33.69	0.01	36.20	111.45
2700.00	1.00	117.92	2699.65	-37.76	-14.04	35.34	0.12	38.03	111.67
2800.00	1.01	121.88	2799.64	-39.46	-14.92	36.86	0.07	39.76	112.04
2900.00	1.01	120.40	2899.62	-41.15	-15.83	38.36	0.03	41.50	112.42
3000.00	1.12	120.82	2999.60	-42.94	-16.78	39.96	0.11	43.34	112.77
3100.00	1.22	120.24	3099.58	-44.90	-17.81	41.72	0.10	45.37	113.12
3200.00	1.38	115.89	3199.56	-47.11	-18.88	43.73	0.19	47.63	113.35
3300.00	1.58	118.11	3299.52	-49.64	-20.05	46.03	0.21	50.20	113.54
3400.00	1.79	113.43	3399.48	-52.52	-21.32	48.67	0.25	53.14	113.66
3500.00	1.90	109.01	3499.43	-55.72	-22.48	51.67	0.18	56.35	113.51
3600.00	1.95	108.28	3599.37	-59.07	-23.56	54.86	0.06	59.70	113.24
3700.00	1.61	110.56	3699.32	-62.17	-24.58	57.79	0.35	62.80	113.04
3800.00	1.54	109.98	3799.29	-64.91	-25.54	60.37	0.07	65.55	112.93
3808.00	1.56	104.28	3807.28	-65.12	-25.60	60.57	1.94	65.76	112.91



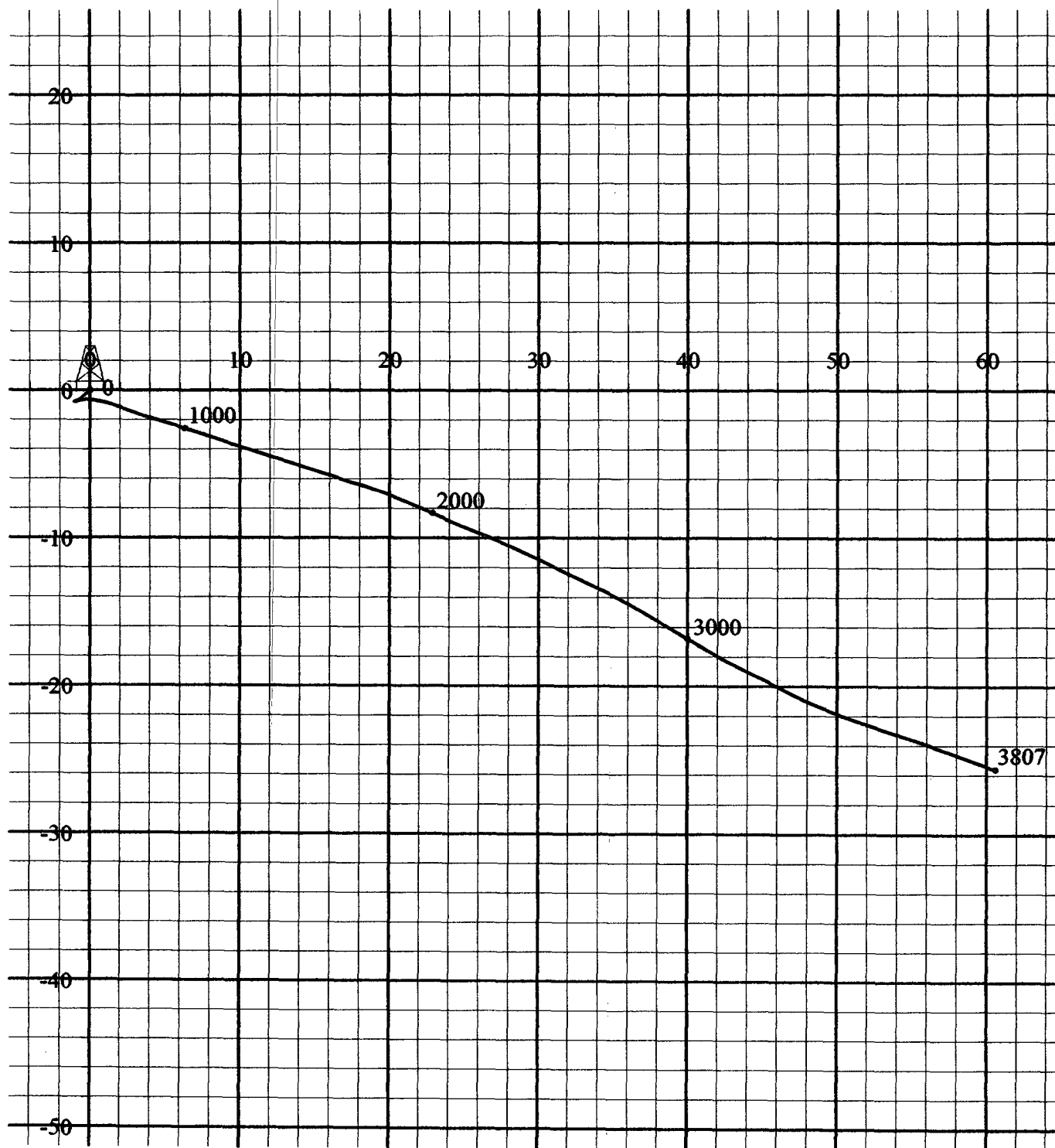
**Scientific
Drilling**

Field: Delaware
Site: Eddy County, NM
Well: Apache 13 Fed #8H
Wellpath: VH - Job #32K0905650
Survey: 09/01/05



West(-)/East(+) [10ft/in]

South(-)/North(+) [10ft/in]





PATHFINDER

ENERGY SERVICES

PathFinder

Planning Report

Company: Devon Energy
Field: Apache - Section 13, T22-S, R30-E
Site: Apache 13 Federal #8H
Well: Apache 13 Federal #8H
Wellpath: Original Hole

Date: 4/19/2005 **Time:** 09:08:29 **Page:** 2
Co-ordinate(NE) Reference: Site: Apache 13 Federal #8H, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,287.74Azi)
Plan: Plan #2 041805

Survey

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
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	0.00	0.00	
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	0.00	0.00	
5000.00	0.00	0.00	5000.00	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	0.00	
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	0.00	0.00	
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	0.00	0.00	
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	0.00	0.00	
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.00	0.00	
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	0.00	0.00	
5700.00	0.00	0.00	5700.00	0.00	0.00	0.00	0.00	0.00	0.00	
5800.00	0.00	0.00	5800.00	0.00	0.00	0.00	0.00	0.00	0.00	
5900.00	0.00	0.00	5900.00	0.00	0.00	0.00	0.00	0.00	0.00	
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	0.00	0.00	
6100.00	0.00	0.00	6100.00	0.00	0.00	0.00	0.00	0.00	0.00	
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	0.00	0.00	
6300.00	0.00	0.00	6300.00	0.00	0.00	0.00	0.00	0.00	0.00	
6322.50	0.00	0.00	6322.50	0.00	0.00	0.00	0.00	0.00	0.00	
6325.00	0.30	287.74	6325.00	0.00	-0.01	0.01	12.00	12.00	0.00	
6350.00	3.30	287.74	6349.98	0.24	-0.75	0.79	12.00	12.00	0.00	
6375.00	6.30	287.74	6374.89	0.88	-2.75	2.88	12.00	12.00	0.00	
6400.00	9.30	287.74	6399.66	1.91	-5.98	6.28	12.00	12.00	0.00	
6425.00	12.30	287.74	6424.21	3.34	-10.44	10.96	12.00	12.00	0.00	

PathFinder

Planning Report

Company: Devon Energy
Field: Apache - Section 13, T22-S, R30-E
Site: Apache 13 Federal #8H
Well: Apache 13 Federal #8H
Wellpath: Original Hole

Date: 4/19/2005 **Time:** 09:08:29 **Page:** 3
Co-ordinate(NE) Reference: Site: Apache 13 Federal #8H, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,287.74Azi)
Plan: Plan #2 041805

Survey

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
6450.00	15.30	287.74	6448.49	5.16	-16.12	16.92	12.00	12.00	0.00	
6475.00	18.30	287.74	6472.42	7.36	-23.00	24.15	12.00	12.00	0.00	
6500.00	21.30	287.74	6495.94	9.94	-31.06	32.61	12.00	12.00	0.00	
6525.00	24.30	287.74	6518.98	12.89	-40.29	42.30	12.00	12.00	0.00	
6550.00	27.30	287.74	6541.49	16.20	-50.65	53.18	12.00	12.00	0.00	
6575.00	30.30	287.74	6563.40	19.87	-62.12	65.22	12.00	12.00	0.00	
6600.00	33.30	287.74	6584.64	23.89	-74.66	78.39	12.00	12.00	0.00	
6625.00	36.30	287.74	6605.17	28.23	-88.25	92.66	12.00	12.00	0.00	
6650.00	39.30	287.74	6624.92	32.90	-102.84	107.98	12.00	12.00	0.00	
6675.00	42.30	287.74	6643.84	37.88	-118.40	124.31	12.00	12.00	0.00	
6700.00	45.30	287.74	6661.89	43.15	-134.88	141.61	12.00	12.00	0.00	
6725.00	48.30	287.74	6679.00	48.70	-152.23	159.83	12.00	12.00	0.00	
6750.00	51.30	287.74	6695.14	54.52	-170.41	178.92	12.00	12.00	0.00	
6775.00	54.30	287.74	6710.25	60.58	-189.38	198.83	12.00	12.00	0.00	
6800.00	57.30	287.74	6724.30	66.88	-209.07	219.51	12.00	12.00	0.00	
6825.00	60.30	287.74	6737.25	73.40	-229.43	240.89	12.00	12.00	0.00	
6850.00	63.30	287.74	6749.07	80.11	-250.41	262.92	12.00	12.00	0.00	
6875.00	66.30	287.74	6759.71	87.00	-271.96	285.53	12.00	12.00	0.00	
6900.00	69.29	287.74	6769.16	94.05	-294.00	308.68	12.00	12.00	0.00	
6925.00	72.29	287.74	6777.38	101.25	-316.48	332.28	12.00	12.00	0.00	
6950.00	75.29	287.74	6784.36	108.56	-339.34	356.29	12.00	12.00	0.00	
6975.00	78.29	287.74	6790.07	115.97	-362.52	380.62	12.00	12.00	0.00	
7000.00	81.29	287.74	6794.50	123.47	-385.95	405.22	12.00	12.00	0.00	
7025.00	84.29	287.74	6797.63	131.03	-409.58	430.02	12.00	12.00	0.00	
7050.00	87.29	287.74	6799.47	138.62	-433.32	454.95	12.00	12.00	0.00	
7072.56	90.00	287.74	6800.00	145.49	-454.79	477.50	12.00	12.00	0.00	
7085.03	90.37	287.74	6799.96	149.30	-466.68	489.98	3.00	3.00	0.02	
7100.00	90.37	287.74	6799.86	153.86	-480.93	504.94	0.00	0.00	0.00	
7200.00	90.37	287.74	6799.21	184.33	-576.18	604.94	0.00	0.00	0.00	
7300.00	90.37	287.74	6798.55	214.80	-671.42	704.94	0.00	0.00	0.00	
7400.00	90.37	287.74	6797.90	245.27	-766.66	804.94	0.00	0.00	0.00	
7500.00	90.37	287.74	6797.25	275.75	-861.90	904.94	0.00	0.00	0.00	
7600.00	90.37	287.74	6796.59	306.22	-957.14	1004.93	0.00	0.00	0.00	
7700.00	90.37	287.74	6795.94	336.69	-1052.38	1104.93	0.00	0.00	0.00	
7800.00	90.37	287.74	6795.29	367.16	-1147.63	1204.93	0.00	0.00	0.00	
7900.00	90.37	287.74	6794.63	397.64	-1242.87	1304.93	0.00	0.00	0.00	
8000.00	90.37	287.74	6793.98	428.11	-1338.11	1404.93	0.00	0.00	0.00	
8100.00	90.37	287.74	6793.33	458.58	-1433.35	1504.92	0.00	0.00	0.00	
8200.00	90.37	287.74	6792.67	489.05	-1528.59	1604.92	0.00	0.00	0.00	
8300.00	90.37	287.74	6792.02	519.53	-1623.83	1704.92	0.00	0.00	0.00	
8400.00	90.37	287.74	6791.37	550.00	-1719.08	1804.92	0.00	0.00	0.00	
8500.00	90.37	287.74	6790.71	580.47	-1814.32	1904.91	0.00	0.00	0.00	
8600.00	90.37	287.74	6790.06	610.94	-1909.56	2004.91	0.00	0.00	0.00	
8700.00	90.37	287.74	6789.41	641.42	-2004.80	2104.91	0.00	0.00	0.00	
8800.00	90.37	287.74	6788.75	671.89	-2100.04	2204.91	0.00	0.00	0.00	
8900.00	90.37	287.74	6788.10	702.36	-2195.29	2304.91	0.00	0.00	0.00	
9000.00	90.37	287.74	6787.45	732.83	-2290.53	2404.90	0.00	0.00	0.00	
9100.00	90.37	287.74	6786.79	763.31	-2385.77	2504.90	0.00	0.00	0.00	
9200.00	90.37	287.74	6786.14	793.78	-2481.01	2604.90	0.00	0.00	0.00	
9300.00	90.37	287.74	6785.49	824.25	-2576.25	2704.90	0.00	0.00	0.00	
9400.00	90.37	287.74	6784.83	854.72	-2671.49	2804.90	0.00	0.00	0.00	
9500.00	90.37	287.74	6784.18	885.20	-2766.74	2904.89	0.00	0.00	0.00	
9600.00	90.37	287.74	6783.53	915.67	-2861.98	3004.89	0.00	0.00	0.00	

PathFinder Planning Report

Company: Devon Energy
Field: Apache - Section 13, T22-S, R30-E
Site: Apache 13 Federal #8H
Well: Apache 13 Federal #8H
Wellpath: Original Hole

Date: 4/19/2005 Time: 09:08:29 Page: 4
Co-ordinate(NE) Reference: Site: Apache 13 Federal #8H, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,287.74Azi)
Plan: Plan #2 041805

Survey

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
9700.00	90.37	287.74	6782.87	946.14	-2957.22	3104.89	0.00	0.00	0.00	
9800.00	90.37	287.74	6782.22	976.61	-3052.46	3204.89	0.00	0.00	0.00	
9900.00	90.37	287.74	6781.57	1007.09	-3147.70	3304.88	0.00	0.00	0.00	
10000.00	90.37	287.74	6780.91	1037.56	-3242.95	3404.88	0.00	0.00	0.00	
10100.00	90.37	287.74	6780.26	1068.03	-3338.19	3504.88	0.00	0.00	0.00	
10139.67	90.37	287.74	6780.00	1080.12	-3375.97	3544.55	0.00	0.00	0.00	

Devon Energy

Apache '13' Federal #8H Section 13, T22-S, R30-E Eddy County, New Mexico Plan #2 - 041805

COMPANY DETAILS

Devon Energy
20 N Broadway, Ste 1500
Oklahoma City, OK 73102
Calculation Method: Minimum Curvature
Error System: Surveying Ellipse
Scale Factor: 1.00000000000000
Warping Method: Elliptical Contour
Warning Method: Error Ratio

SITE DETAILS

Apache '13' Federal #8H
Eddy County, New Mexico
Site Center Latitude: 32°23'29.970N
Longitude: 103°49'34.110W
Ground Level: 3347.00
Positional Uncertainty: 0.00
Contour Interval: 0.27

No.	MD	Annotation
1	6322.50	KOP w/ 2' Build Rate
2	6799.96	End of Build @ 90.37' Extension
3	7085.03	End of Build @ 90.37' Extension

WELL DETAILS

Name	+N/S	+E/W	Northing	Easting	Latitude	Longitude	Spot
Apache '13' Federal #8H	0.00	0.00	506571.30	656555.62	32°23'29.970N	103°49'34.110W	N/A

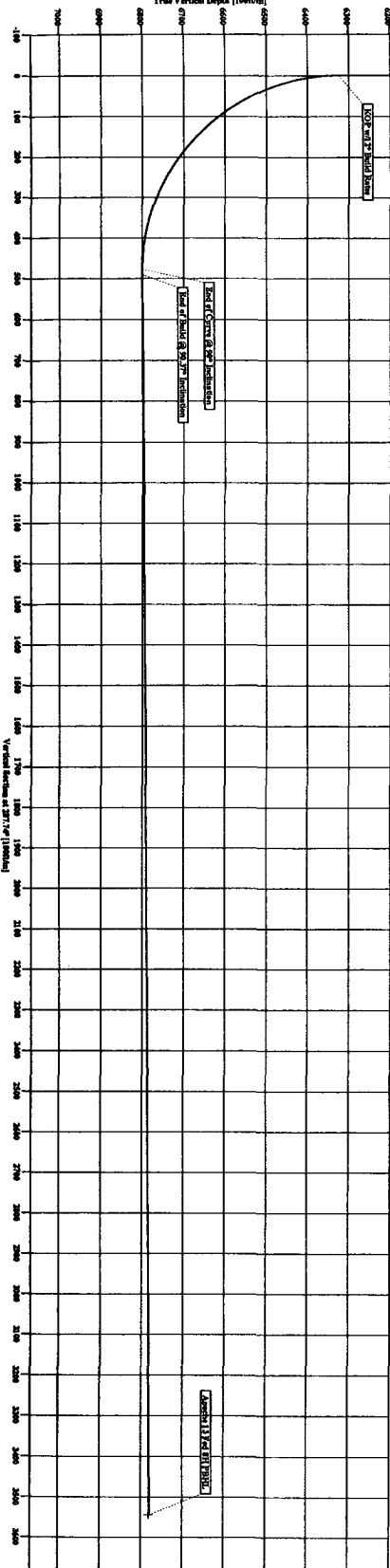
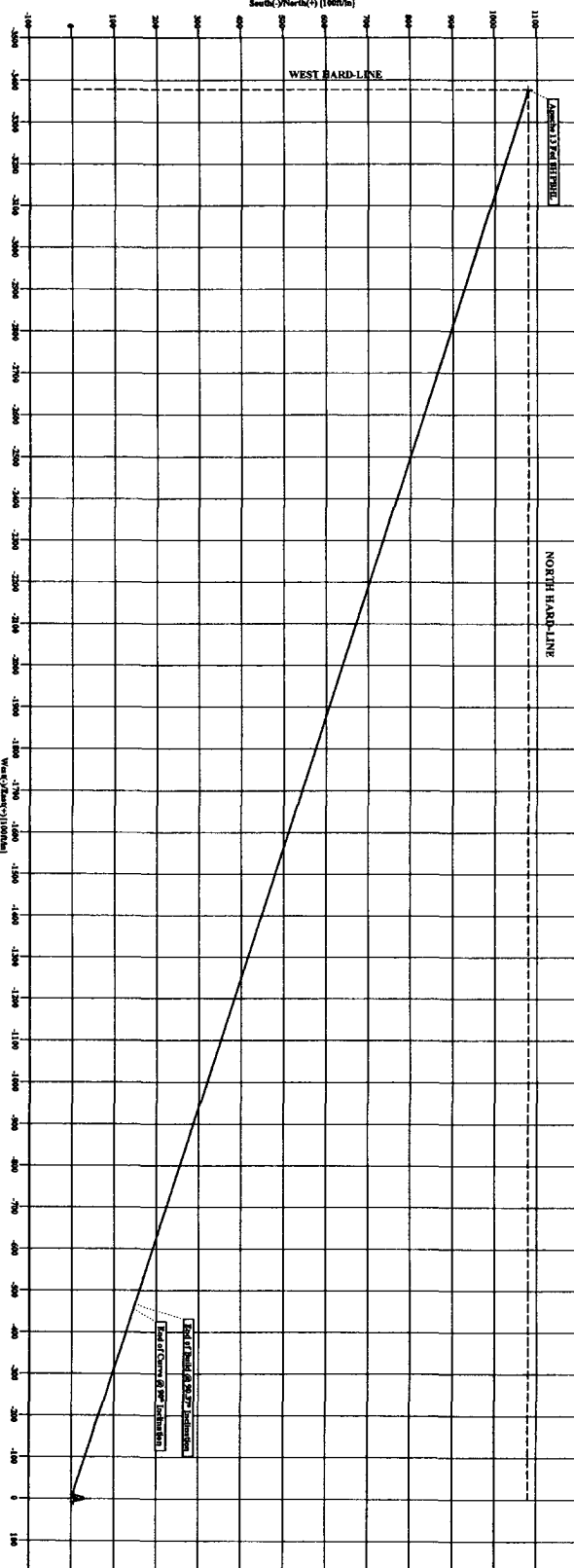
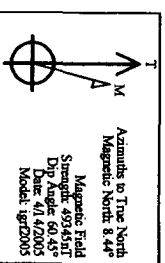
FIELD DETAILS

Apache - Section 13, T22-S, R30-E
Eddy County, New Mexico
Geoidetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: IGR2005
System Datum: Mean Sea Level
Local North: True North

TARGET DETAILS

Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TTrace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	6322.50	0.00	0.00	6322.50	0.00	0.00	0.00	0.00	0.00	
3	7077.56	90.00	287.74	6800.00	1.4549	-454.79	12.00	287.74	477.50	
4	7085.03	90.37	287.74	6799.96	1.4930	-466.68	3.00	0.31	489.98	
5	10139.67	90.37	287.74	6780.00	1080.12	-3375.97	0.00	0.00	3544.55	Apache '13' Fed 8H PBHL

— Plan #2 041805

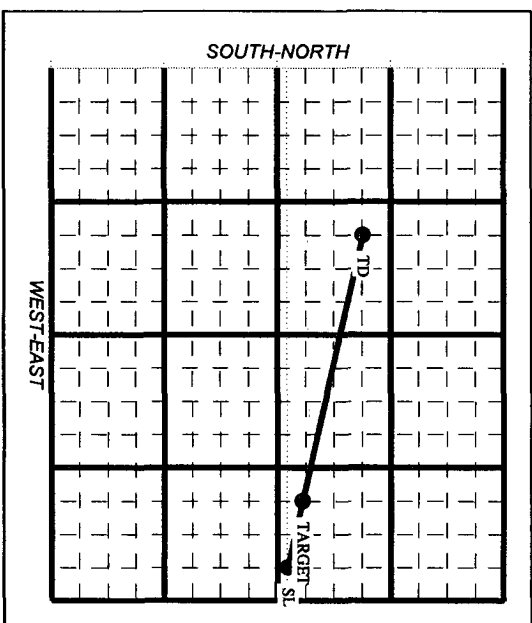


FILE: Apache 13-8 dir proposal.XLS

Devon
Apache 13 Fed #8
Quahada Ridge (Del)
Sec 13, T22S, R30E

Blount
5/4/2004

devon



Design Data		MD	TV/D	Total Disp.	Azimuth: N 75.07° W Build Rate (Deg/100°): 15.00° Ramp Angle (Deg): 91.00°
Kir Point	6.423	6.423	0		
E _{in} Build	7.030	6.805	389		
TD	6.990	6.780	246		

[illegible]