

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

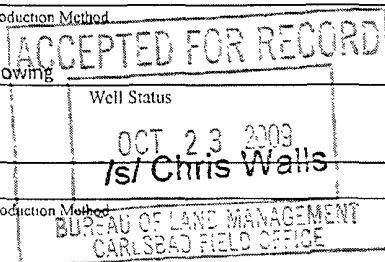
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FORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other						5. Lease Serial No. NM-94076			
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 Cimarex Energy Co. of Colorado						7. Unit or CA Agreement Name and No Pending			
3. Address 600 N. Marienfeld St., Ste. 600; Midland, TX 79701				3a. Phone No. (include area code) 432-571-7800		8. Lease Name and Well No Pintail 23 Federal Com No. 5Y			
4. Location of Well (Report Location clearly and in accordance with Federal requirements)* At surface 1310 FNL & 740 FWL At top prod. interval reported below 1310 FNL & 740 FWL At total depth 1657 FSL & 772 FWL						9. API Well No 30-015-37097			
14. Date Spudded 06.02.09						15. Date T.D. Reached 06.15.09			
16. Date Completed ☐ D & A ☒ Ready to Prod. 07.12.09						17. Elevations (DF, RKB, RT, GL)* 3325' GR			
18. Total Depth MD 5273' TVD 3024'		19. Plug Back TD MD 5273' TVD 3024'		20. Depth Bridge Plug Set MD TVD		10. Field and Pool, or Exploratory Cottonwood Draw; Delaware Wildcat			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) Micro-CFL / GR, CN / GR						11. Sec., T., R., M., on Block and Survey or Area 23-25S-26E			
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit report) Directional Survey ☐ No ☒ Yes (Submit copy)						12. County or Parish Eddy			
23. Casing and Liner Record (Report all strings set in well)						13. State NM			
Hole Size	Size/Grade	Wt (#/ft)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No of Sks & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12 1/4"	8 3/4"	24	0'	441'		300 sx Cl C		0'	
7 7/8"	5 1/2"	17	0'	2780'		600 sx Cl C & H		0'	
7 7/8"	2 3/4"	2.18	2780'	3366'					
4 3/4"	2 3/4"	6.5	2685'	5100'		No cmt, PEAK liner\			
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 3/4"	2677'								
25. Producing Intervals					26. Perforation Record				
Formation		Top	Bottom	Perforated Interval	Size	No Holes	Perf Status		
A) Cherry Canyon (Delaware)		2,846'	TD	no perms. frac'd through PEAK liner					
B)									
C)									
D)									
27. Acid, Fracture, Treatment, Cement Squeeze, etc									
Depth Interval		Amount and Type of Material			Depth Interval		Amount and Type of Material		
4930-5099'		49.3 bbl 20# Gel & 2859# 16-30 Sand			3498-3165'		62.5 bbl 20# Gel & 7080# 16-30 Sand		
4564-4930'		57.8 bbl 20# Gel & 5948# 16-30 Sand							
4230-4564'		48.4 bbl 20# Gel & 4448# 16-30 Sand							
3865-4230'		26.7 bbl 20# Gel & 4715# 16-30 Sand							
3498-3865'		31.4 bbl 20# Gel & 5272# 16-30 Sand							
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
07.12.09	08.09.09	24	→	259	325	199	45.2	btu 1.0	Flowing
Choke Size	Tbg. Press Flwg.	Csg. Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
25/64	SI 654	20	→				1,255	Producing	
28. 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.	Csg. Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
	SI		→						

* (See instructions and spaces for additional data on page 2)



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	

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

Flared from 07-12-09 to 08-07-09. Then sold.

30. 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
				Top Salt	1037'
				Base Salt	1693'
				Delaware	1894'
				Cherry Canyon	2846'

32. Additional remarks (include plugging procedure).

33. Indicate which items have been attached by placing a check in the appropriate boxes:

☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other: PEAK Systems Drawing, Deviation Report, C-102

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) Natalie Krueger Title Regulatory
 Signature Natalie Krueger Date October 13, 2009

Title 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.

30-015-37097

SUR: Unit E - 23-25e-26e

Operator Cimarex Energy Co. of Colorado
Well/Lease Pintail 23 Federal Com No. 5Y
County Eddy, NM

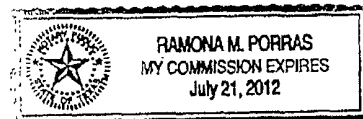
State of New Mexico
Deviation Report

250	1.0
440	1.0
661	1.0
1042	2.0
1292	4.0
1312	1.0
1459	1.0
1614	4.0
1725	2.0
1978	2.0
2178	1.0
2658	1.0
2978	1.0
3364	2.0

State of:
County Of:

The foregoing instrument was acknowledged before me on 7/24/09 by
[Signature] on behalf of Key Energy Services.

Ramona M. Porras
Notary Public for: Texas
My Commission expires: 7-21-12



Cimarex Energy Co.

Cimarex Energy Co.

Project: Eddy Co., NM
Site: Sec.23-T25S-R26E
Well: Pintail "23" Federal Com #5Y
Wellbore: Wellbore #1
Design: Design #2
Lat: 32° 7' 8.278 N
Long: 104° 16' 10.598 W
GL: 3325.00
KB: WELL1 @ 3342.00ft (KB)



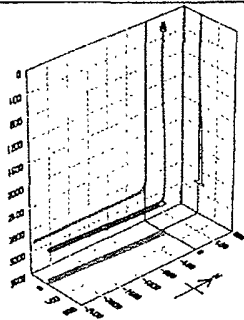
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
2700.00	1.08	127.57	2697.69	8.02	69.45	0.00	0.00	-9.34	Tie-In Survey (Gyro)
2849.42	1.08	127.57	2847.68	6.30	71.68	0.00	0.00	-7.66	Proj Svy / KOP / Start DLS 30.00°
3147.37	90.00	182.92	3036.00	-184.57	64.89	30.00	55.35	183.31	EOB / Start 2140.10 hold at 3147.37 MD
6287.47	90.00	182.92	3036.00	-2321.89	-44.03	0.00	0.00	2322.31	TD at 5287.47

WELL DETAILS: Pintail "23" Federal Com #5Y

+N/-S	+E/-W	Northing	Ground Level:	3325.00	Eastings	Latitude	Longitude	Slot
0.00	0.00	407021.843	561065.255	32° 7' 8.278 N	104° 16' 10.598 W			

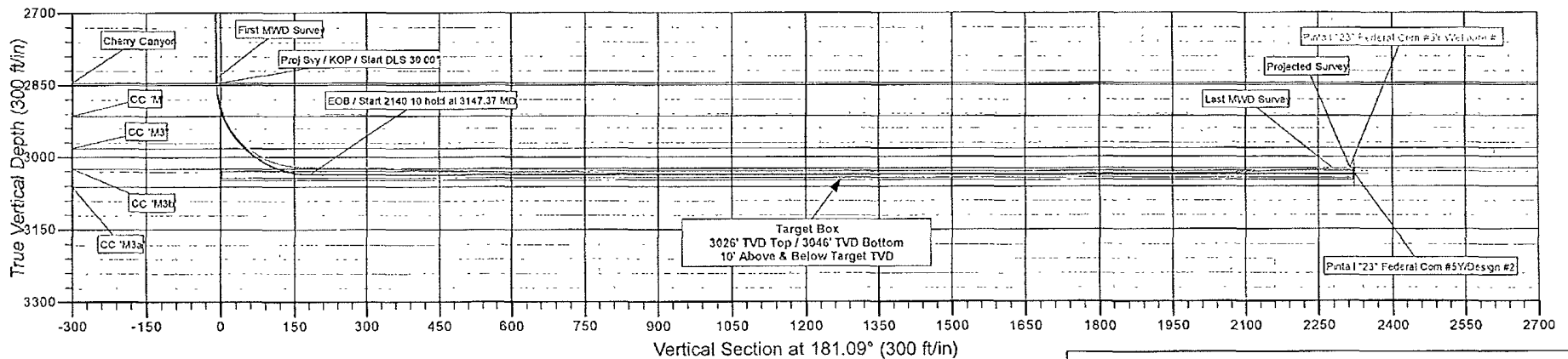
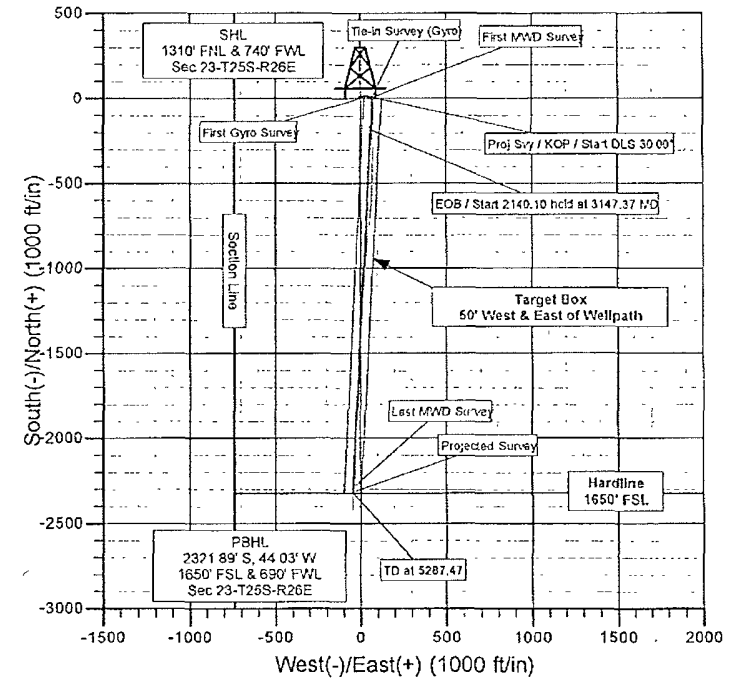
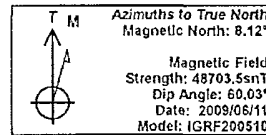
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Pintail 23 #5Y PBHL 3036.00	-2321.89	-44.03	32° 6' 45.300 N	104° 16' 11.110 W	Rectangle (Sides: L20.00 W100.00)	



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2846.00	2848.34	CC 'M3a'
2915.00	2919.02	Cherry Canyon
2982.00	3000.13	CC 'M'
3024.00	3079.32	CC 'M3'
		CC 'M3b'



Plan: Design #2 (Pintail "23" Federal Com #5Y/Wellbore #1)

Created By: Bret Wolford Date: 15:00, June 15 2009

Cimarex Energy Co.

Eddy Co., NM

Sec.23-T25S-R26E

Pintail "23" Federal Com #5Y

Wellbore #1

Design: Wellbore #1

Standard Survey Report

15 June, 2009



Quantum Motors & Directional Services

Survey Report



Company:	Cimarex Energy Co.	Local Co-ordinate Reference:	Well Pintail "23" Federal Com #5Y
Project:	Eddy Co., NM	TVD Reference:	WELL1 @ 3342.00ft (KB)
Site:	Sec.23-T25S-R26E	MD Reference:	WELL1 @ 3342.00ft (KB)
Well:	Pintail "23" Federal Com #5Y	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 2003.21 Single User Db

Project:	Eddy Co., NM
Map System:	US State Plane 1983
Geo Datum:	North American Datum 1983
Map Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level

Site:	Sec.23-T25S-R26E	
Site Position:	Northing: 407,021.843 ft	Latitude: 32° 7' 8.278 N
From: Lat/Long	Easting: 561,065.255 ft	Longitude: 104° 16' 10.598 W
Position Uncertainty: 0.00 ft	Slot Radius: "	Grid Convergence: 0.03 °

Well:	Pintail "23" Federal Com #5Y		
Well Position	+N/-S 0.00 ft	Northing: 407,021.843 ft	Latitude: 32° 7' 8.278 N
	+E/-W 0.00 ft	Easting: 561,065.255 ft	Longitude: 104° 16' 10.598 W
Position Uncertainty	0.00 ft	Wellhead Elevation: ft	Ground Level: 3,325.00 ft

Wellbore:	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	2009/06/11	(°) 8.12	(°) 60.03	(nT) 48,704

Design:	Wellbore #1			
Audit Notes:				
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00		
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft) 0.00	(ft) 0.00	(ft) 0.00	(°) 83.41

Survey Program	Date: 2009/06/15			
From	To	Survey (Wellbore)	Tool Name	Description
100.00	2,700.00	Survey #1 (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
2,838.00	5,273.00	Survey #2 (Wellbore #1)	MWD	MWD - Standard

Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
First Gyro Survey									
100.00	0.24	262.18	100.00	-0.03	-0.21	-0.21	0.24	0.24	0.00
200.00	0.43	285.18	200.00	0.04	-0.78	-0.77	0.23	0.19	23.00
300.00	0.46	291.09	299.99	0.28	-1.51	-1.47	0.05	0.03	5.91
400.00	0.65	303.35	399.99	0.74	-2.36	-2.26	0.22	0.19	12.26
500.00	0.62	313.65	499.98	1.43	-3.23	-3.04	0.12	-0.03	10.30
600.00	1.02	340.04	599.97	2.64	-3.92	-3.59	0.54	0.40	26.39
700.00	1.27	339.37	699.95	4.51	-4.62	-4.07	0.25	0.25	-0.67
800.00	1.37	328.87	799.93	6.57	-5.63	-4.83	0.26	0.10	-10.50
900.00	0.81	326.30	899.91	8.18	-6.64	-5.65	0.56	-0.56	-2.57
1,000.00	0.60	338.54	999.90	9.26	-7.22	-6.11	0.26	-0.21	12.24

Quantum Motors & Directional Services

Survey Report



Company: Cimarex Energy Co.	Local Co-ordinate Reference: Well Pintail "23" Federal Com #5Y	
Project: Eddy Co., NM	TVD Reference: WELL1 @ 3342.00ft (KB)	
Site: Sec.23-T25S-R26E	MD Reference: WELL1 @ 3342.00ft (KB)	
Well: Pintail "23" Federal Com #5Y	North Reference: True	
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature	
Design: Wellbore #1	Database: EDM 2003.21 Single User Db	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,100.00	1.59	56.89	1,099.89	10.50	-6.25	-5.00	1.58	0.99	78.35
1,200.00	3.50	76.41	1,199.78	11.98	-2.12	-0.73	2.07	1.91	19.52
1,300.00	3.70	76.78	1,299.59	13.43	3.99	5.50	0.20	0.20	0.37
1,400.00	3.84	80.41	1,399.37	14.73	10.43	12.05	0.28	0.14	3.63
1,500.00	4.11	82.66	1,499.13	15.74	17.29	18.98	0.31	0.27	2.25
1,600.00	4.43	83.89	1,598.85	16.61	24.68	26.43	0.33	0.32	1.23
1,700.00	4.53	86.35	1,698.55	17.27	32.46	34.23	0.22	0.10	2.46
1,800.00	3.53	91.94	1,798.30	17.42	39.48	41.22	1.07	-1.00	5.59
1,900.00	2.81	101.09	1,898.15	16.85	44.96	46.60	0.88	-0.72	9.15
2,000.00	2.43	103.58	1,998.04	15.88	49.43	50.92	0.40	-0.38	2.49
2,100.00	2.26	106.36	2,097.96	14.82	53.38	54.73	0.20	-0.17	2.78
2,200.00	2.08	106.75	2,197.89	13.75	57.01	58.21	0.18	-0.18	0.39
2,300.00	1.90	105.83	2,297.83	12.77	60.34	61.41	0.18	-0.18	-0.92
2,400.00	1.76	107.24	2,397.77	11.86	63.41	64.35	0.15	-0.14	1.41
2,500.00	1.28	115.94	2,497.74	10.92	65.88	66.69	0.53	-0.48	8.70
2,600.00	1.48	135.25	2,597.71	9.51	67.79	68.43	0.50	0.20	19.31
Last Gyro Survey									
2,700.00	1.08	127.57	2,697.69	8.02	69.45	69.91	0.43	-0.40	-7.68
First MWD Survey									
2,838.00	0.70	140.10	2,835.67	6.58	71.02	71.30	0.31	-0.28	9.08
2,869.00	3.80	180.00	2,866.64	5.41	71.14	71.29	10.62	10.00	128.71
2,901.00	15.50	177.30	2,898.13	0.06	71.34	70.88	36.58	36.56	-8.44
2,933.00	27.40	177.00	2,927.86	-11.61	71.93	70.12	37.19	37.19	-0.94
2,965.00	39.30	177.80	2,954.55	-29.15	72.71	68.88	37.21	37.19	2.50
2,996.00	49.80	177.00	2,976.61	-50.84	73.71	67.39	33.92	33.87	-2.58
3,027.00	60.20	179.60	2,994.37	-76.19	74.42	65.19	34.24	33.55	8.39
3,060.00	69.50	179.70	3,008.38	-106.03	74.60	61.94	28.18	28.18	0.30
3,092.00	79.50	182.20	3,016.92	-136.82	74.08	57.89	32.14	31.25	7.81
3,124.00	88.20	178.70	3,020.34	-168.60	73.84	54.00	29.28	27.19	-10.94
3,155.00	88.70	178.70	3,021.18	-199.58	74.54	51.15	1.61	1.61	0.00
3,187.00	89.10	179.10	3,021.80	-231.56	75.15	48.08	1.77	1.25	1.25
3,219.00	89.00	179.20	3,022.33	-263.56	75.63	44.89	0.44	-0.31	0.31
3,251.00	89.40	180.70	3,022.77	-295.55	75.66	41.24	4.85	1.25	4.69
3,282.00	88.30	181.40	3,023.40	-326.54	75.09	37.12	4.21	-3.55	2.26
3,312.00	88.30	181.60	3,024.29	-356.52	74.30	32.90	0.67	0.00	0.67
3,344.00	87.90	180.90	3,025.35	-388.49	73.60	28.54	2.52	-1.25	-2.19
3,375.00	87.60	180.70	3,026.56	-419.46	73.17	24.56	1.16	-0.97	-0.65
3,407.00	87.70	180.90	3,027.88	-451.43	72.73	20.44	0.70	0.31	0.62
3,438.00	88.90	181.30	3,028.80	-482.41	72.13	16.30	4.08	3.87	1.29
3,470.00	89.10	181.20	3,029.35	-514.40	71.43	11.93	0.70	0.62	-0.31
3,502.00	89.50	181.80	3,029.75	-546.39	70.60	7.43	2.25	1.25	1.87
3,533.00	89.90	183.40	3,029.91	-577.36	69.19	2.48	5.32	1.29	5.16
3,565.00	89.80	185.20	3,029.99	-609.26	66.79	-3.56	5.63	-0.31	5.62
3,597.00	89.90	185.50	3,030.08	-641.12	63.81	-10.18	0.99	0.31	0.94
3,628.00	90.10	186.50	3,030.08	-671.95	60.57	-16.94	3.29	0.65	3.23
3,660.00	89.10	186.40	3,030.30	-703.75	56.97	-24.16	3.14	-3.12	-0.31
3,692.00	89.00	186.30	3,030.83	-735.55	53.43	-31.32	0.44	-0.31	-0.31
3,723.00	89.00	186.20	3,031.37	-766.36	50.06	-38.21	0.32	0.00	-0.32
3,755.00	88.60	185.90	3,032.04	-798.18	46.69	-45.21	1.56	-1.25	-0.94
3,787.00	88.60	186.10	3,032.82	-829.99	43.34	-52.18	0.62	0.00	0.62
3,818.00	88.40	186.00	3,033.63	-860.81	40.08	-58.96	0.72	-0.65	-0.32
3,850.00	88.40	185.50	3,034.53	-892.63	36.87	-65.80	1.56	0.00	-1.56
3,882.00	88.50	185.60	3,035.39	-924.47	33.78	-72.53	0.44	0.31	0.31
3,914.00	88.60	185.10	3,036.20	-956.32	30.79	-79.14	1.59	0.31	-1.56

Quantum Motors & Directional Services

Survey Report



Company: Cimarex Energy Co.
 Project: Eddy Co., NM
 Site: Sec.23-T25S-R26E
 Well: Pintail "23" Federal Com #5Y
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well Pintail "23" Federal Com #5Y
 TVD Reference: WELL1 @ 3342.00ft (KB)
 MD Reference: WELL1 @ 3342.00ft (KB)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Database: EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,945.00	89.50	184.50	3,036.72	-987.21	28.20	-85.26	3.49	2.90	-1.94
3,977.00	89.50	184.80	3,037.00	-1,019.10	25.61	-91.50	0.94	0.00	0.94
4,007.00	89.90	184.10	3,037.15	-1,049.01	23.28	-97.25	2.69	1.33	-2.33
4,040.00	90.00	184.40	3,037.18	-1,081.92	20.83	-103.45	0.96	0.30	0.91
4,071.00	89.80	184.40	3,037.24	-1,112.83	18.46	-109.36	0.65	-0.65	0.00
4,103.00	89.60	184.30	3,037.40	-1,144.74	16.03	-115.43	0.70	-0.62	-0.31
4,134.00	89.20	183.40	3,037.73	-1,175.66	13.95	-121.05	3.18	-1.29	-2.90
4,165.00	88.90	183.60	3,038.24	-1,206.60	12.06	-126.48	1.16	-0.97	0.65
4,197.00	88.80	183.10	3,038.88	-1,238.54	10.19	-132.00	1.59	-0.31	-1.56
4,229.00	88.90	183.40	3,039.53	-1,270.48	8.37	-137.47	0.99	0.31	0.94
4,261.00	88.50	184.10	3,040.25	-1,302.41	6.28	-143.21	2.52	-1.25	2.19
4,292.00	88.40	184.00	3,041.09	-1,333.32	4.09	-148.93	0.46	-0.32	-0.32
4,324.00	88.70	183.30	3,041.90	-1,365.24	2.05	-154.62	2.38	0.94	-2.19
4,355.00	88.50	183.20	3,042.66	-1,396.18	0.30	-159.91	0.72	-0.65	-0.32
4,386.00	89.60	182.90	3,043.17	-1,427.13	-1.35	-165.10	3.68	3.55	-0.97
4,418.00	90.30	182.80	3,043.20	-1,459.09	-2.94	-170.35	2.21	2.19	-0.31
4,449.00	90.20	182.80	3,043.06	-1,490.06	-4.46	-175.41	0.32	-0.32	0.00
4,481.00	91.20	182.10	3,042.67	-1,522.02	-5.83	-180.43	3.81	3.12	-2.19
4,512.00	91.10	182.10	3,042.05	-1,553.00	-6.96	-185.12	0.32	-0.32	0.00
4,544.00	90.90	181.70	3,041.49	-1,584.97	-8.02	-189.84	1.40	-0.62	-1.25
4,575.00	91.80	181.40	3,040.76	-1,615.95	-8.86	-194.23	3.06	2.90	-0.97
4,607.00	91.30	181.50	3,039.90	-1,647.93	-9.67	-198.70	1.59	-1.56	0.31
4,639.00	90.90	181.40	3,039.28	-1,679.92	-10.48	-203.18	1.29	-1.25	-0.31
4,671.00	90.50	181.30	3,038.89	-1,711.91	-11.23	-207.60	1.29	-1.25	-0.31
4,702.00	90.10	181.50	3,038.73	-1,742.90	-11.99	-211.90	1.44	-1.29	0.65
4,733.00	90.00	181.80	3,038.70	-1,773.88	-12.88	-216.35	1.02	-0.32	0.97
4,765.00	90.50	181.80	3,038.56	-1,805.87	-13.89	-221.01	1.56	1.56	0.00
4,797.00	90.20	182.10	3,038.37	-1,837.85	-14.98	-225.77	1.33	-0.94	0.94
4,829.00	92.00	181.70	3,037.75	-1,869.82	-16.04	-230.49	5.76	5.62	-1.25
4,860.00	92.00	182.20	3,036.67	-1,900.79	-17.09	-235.09	1.61	0.00	1.61
4,892.00	91.80	182.40	3,035.61	-1,932.74	-18.38	-240.03	0.88	-0.62	0.62
4,923.00	91.70	183.10	3,034.66	-1,963.69	-19.86	-245.06	2.28	-0.32	2.26
4,955.00	90.50	182.20	3,034.05	-1,995.65	-21.34	-250.20	4.69	-3.75	-2.81
4,987.00	90.30	182.00	3,033.83	-2,027.63	-22.51	-255.03	0.88	-0.62	-0.62
5,018.00	91.50	181.40	3,033.34	-2,058.61	-23.43	-259.50	4.33	3.87	-1.94
5,049.00	92.70	181.30	3,032.20	-2,089.58	-24.16	-263.78	3.88	3.87	-0.32
5,081.00	92.60	181.50	3,030.72	-2,121.54	-24.94	-268.22	0.70	-0.31	0.62
5,113.00	92.40	181.50	3,029.33	-2,153.49	-25.78	-272.72	0.62	-0.62	0.00
5,144.00	92.40	181.50	3,028.03	-2,184.46	-26.59	-277.08	0.00	0.00	0.00
5,176.00	92.40	182.20	3,026.69	-2,216.41	-27.62	-281.77	2.19	0.00	2.19
5,207.00	91.70	182.70	3,025.58	-2,247.36	-28.95	-286.64	2.77	-2.26	1.61
Last MWD Survey									
5,239.00	91.50	182.90	3,024.69	-2,279.31	-30.51	-291.85	0.88	-0.62	0.62
Projected Survey									
5,273.00	91.50	182.90	3,023.80	-2,313.26	-32.23	-297.46	0.00	0.00	0.00

Quantum Motors & Directional Services
Survey Report



Company: Cimarex Energy Co. Local Co-ordinate Reference: Well Pintail "23" Federal Com #5Y
Project: Eddy Co., NM TVD Reference: WELL1 @ 3342.00ft (KB)
Site: Sec.23-T25S-R26E MD Reference: WELL1 @ 3342.00ft (KB)
Well: Pintail "23" Federal Com #5Y North Reference: True
Wellbore: Wellbore #1 Survey Calculation Method: Minimum Curvature
Design: Wellbore #1 Database: EDM 2003.21 Single User Db

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
100.00	100.00	-0.03	-0.21	First Gyro Survey
2,700.00	2,697.69	8.02	69.45	Last Gyro Survey
2,838.00	2,835.67	6.58	71.02	First MWD Survey
5,239.00	3,024.69	-2,279.31	-30.51	Last MWD Survey
5,273.00	3,023.80	-2,313.26	-32.23	Projected Survey

Checked By: _____ Approved By: _____ Date: _____

Peak Completion Technologies

BOTTOM CSG 2780'

Top of ASIX 2678', On/Off 2674'

DOWN HOLE WELL PROFILE

WELL NAME	Pintail 23 Fed 5 Y	DATE	6/15/09
SUPERVISOR	Randy Payne	TOOL HAND	James D/Doug T.
PHONE #	575-390-3154	PHONE #	432-664-6392
RIG #	Key Energy 880	FIELD TICKET #	

ELEVATIONS

KB ELEV	GL ELEV	KB TO THF	KB TO SCF	RIG KBD	PBTD
CASING / OPEN HOLE LAYOUT	OD (IN)	LANDED DEPTH	WEIGHT (LB/FT)	TOP OF (FTKB)	
CASING DESCRIPTION	5.5	2780'	17 #		
WINDOW DESCRIPTION					
OPEN HOLE DESCRIPTION	4.75	5272'	JUNCTION @	11780'	

DESCRIPTION

BOTTOM OF CURVE 3187' MD

STEERING DIRECTIONS

DOWNHOLE DESCRIPTION FROM BOTTOM UP (Tubing String)

BOTTOM @	DESCRIPTION	LENGTH	ID	OD
5100.00	Pumpoff Plug	0.78	0.750	3.630
5099.22	2 Jts 2 7/8" 6.5# L-80 EUE 8 Rd Liner (1-2)	65.21	2.441	2.875
5034.01	4 3/8 Open Hole Anchor 1	4.41	2.441	4.625
5029.60	3 Jts 2 7/8 6.5# L-80 EUE Liner (3-5)	97.96	2.441	2.875
4931.64	4 5/8" Centralizer	0.51	2.441	4.625
4931.13	4 1/2 ISO PAK 1	4.52	2.441	4.500
4926.61	5 Jts 2 7/8 6.5 # L-80 EUE Liner (6-10)	163.26	2.441	2.875
4763.35	Strata Port 1.06" ID	2.19	1.060	4.000
4761.16	6 Jts 2 7/8 6.5 # L-80 EUE Liner (11-16)	195.89	2.441	2.875
4565.27	Centralizer	0.52	2.441	4.625
4564.75	4 1/2 ISO PAK 2	4.48	2.441	4.500
4560.27	5 Jts 2 7/8 6.5 # L-80 EUE Liner (17-21)	163.14	2.441	2.875
4397.13	Strata Port 1.31" ID	2.19	1.310	4.000
4394.94	5 Jts 2 7/8 6.5 # L-80 EUE Liner (22-26)	163.12	2.441	4.500
4231.82	Centralizer	0.52	2.441	4.625
4231.30	4 1/2 ISO PAK 3	4.48	2.441	4.500
4226.82	5 Jts 2 7/8 6.5 # L-80 EUE Liner (27-31)	163.09	2.441	2.875
4063.73	Strata Port 1.56" ID	2.19	1.560	4.000
4061.54	6 Jts 2 7/8 6.5 # L-80 EUE Liner (32-37)	195.88	2.441	2.875
3865.66	4 5/8" Centralizer	0.52	2.441	4.625
3865.14	4 1/2 ISO PAK 4	4.49	2.442	4.500
3860.65	5 Jts 2 7/8 6.5 # L-80 EUE Liner (38-42)	163.41	2.441	2.875
3697.24	Strata Port 1.81" ID	2.19	1.810	4.000
3695.05	6 Jts 2 7/8 6.5 # L-80 EUE Liner (43-48)	195.80	2.441	2.875
3499.25	4 5/8" Centralizer	0.52	2.441	4.625
3498.73	4 1/2 ISO PAK 5	4.50	2.441	4.500
3494.23	5 Jts 2 7/8 6.5# L-80 EUE Liner (49-53)	163.50	2.441	2.875
3330.73	Strata Port 2.06" ID	2.19	2.060	4.000
3328.54	5 Jts 2 7/8 6.5 # L-80 EUE Liner (54-58)	162.29	2.441	2.875
3166.25	4 5/8" Centralizer	0.52	2.441	4.625
3165.73	4 1/2 ISO PAK 6	4.50	2.441	4.500
3161.23	XO 2 7/8 UFX BOX x 2 7/8 8 RD Pin	1.05	2.441	3.060
3160.18	15 Jts 2 7/8 6.5 # L-80 EUE Liner (1-15)			2.875

ISO PAK # 6 3165'

2.06" Strata Port 3329'

ISO PAK # 5 3498'

1.81" Strata Port 3696'

ISO PAK #4 3865'

1.56" Strata Port 4062'

2.660

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-37097	Pool Code 96541	Pool Name Cottonwood Draw; Delaware Wildcat
Property Code	Property Name PINTAIL "23" FEDERAL COM	Well Number 5 Y
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3325'

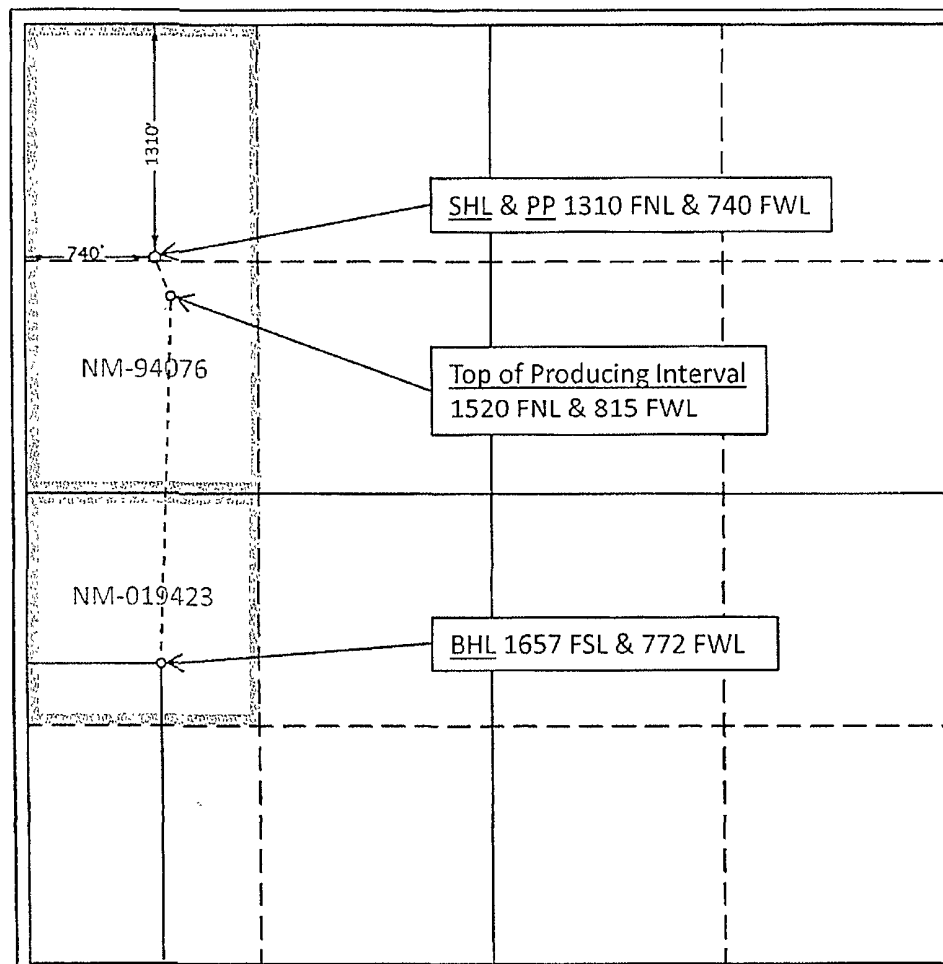
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	23	25 S	26 E		1310	NORTH	740	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	23	25 S	26 E		1657	SOUTH	772	WEST	EDDY
Dedicated Acres 120	Joint or Infill	Consolidation Code P	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <u>Zeno Farris</u> 10/13/2009 Signature Date <u>Zeno Farris</u> Printed Name SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. NOVEMBER 24 2008 Date Surveyed <u>Gary L. Jones</u> Signature of Professional Surveyor W.O. Jones 7977 Certificate No. BASIN SURVEYS
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