

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

MAY 12 2009

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other		5. Lease Serial No. NM-94839
2. Name of Operator Cimarex Energy Co. of Colorado		6. If Indian, Allottee or Tribe Name
3a. Address 5215 N. O'Connor blvd. ste 1500 Irving Tx 75039	3b. Phone No. (include area code) 972-401-3111	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL 1250 FSL & 760 FEL 22-25S-26E BHL 1980 FSL & 660 FWL		8. Well Name and No. Cottonwood Draw 22 Federal Com No. 1
		9. API Well No. 30-015-36592
		10. Field and Pool, or Exploratory Area Wildcat; Wolfcamp
		11. County or Parish, State Eddy County, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Sidetrack due to
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	junk in hole
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof.

If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

10/15/2008 Begin drlg 6 1/8" horizontal sidetrack.

11/11/2008 While drilling 6 1/8" horizontal twisted off joint. Fish = 16' twist off + 35 stands + 3 - 6 1/8" mills left in hole. Length of fish = 3341'

11/15/2008 Unable to retrieve twisted off joints. HOWCO to set a cement sidetrack plug. Cmdt w/75 sx of class H, 0.75% CFR-3, 0.35% HR, 17.5 lbm/gal, yield .95. Tagged TOC @ 9600' MD per operator 5/11/09

Because of Junk in hole described above Cimarex will plug off, and propose new sidetrack for the Cottonwood Draw 22 Federal No.1 BHL as shown below.

Previous Location

BHL 1980' FSL & 660' FWL

Eddy County, NM

New Location

BHL 1960' FSL & 660' FWL

Eddy County, NM

Please see attached revised C-102, preliminary directional survey.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Scott Haynes

Signature

Title

Regulatory Analyst

Date

February 20, 2009

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

MAY 11 2009

Office

WESLEY W. INGRAM

REGISTERED PROFESSIONAL ENGINEER

Conditions of Approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, makes 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.

(Instructions on reverse)



Cimarex Energy Co. of Colorado

Location: Eddy County, NM
Field: (Cottonwood) Sec 22, T25S, R26E
Facility: Cottonwood Draw 22 FED COM No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H ST PWB

Plot reference wellpath is Plan #4

True vertical depths are referenced to Rig on No. 1H SHL (RT)

Measured depths are referenced to Rig on No. 1H SHL (RT)

Rig on No. 1H SHL (RT) to Mean Sea Level 3307 feet

Mean Sea Level to Mud Line (Facility Cottonwood Draw 22 FED COM No. 1H) -3289 feet

Coordinates are in feet referenced to Facility Center

Grid System: NAD83 / TM New Mexico State Plane East Zone (3001) US feet

North Reference: Grid north

Scale: True distance

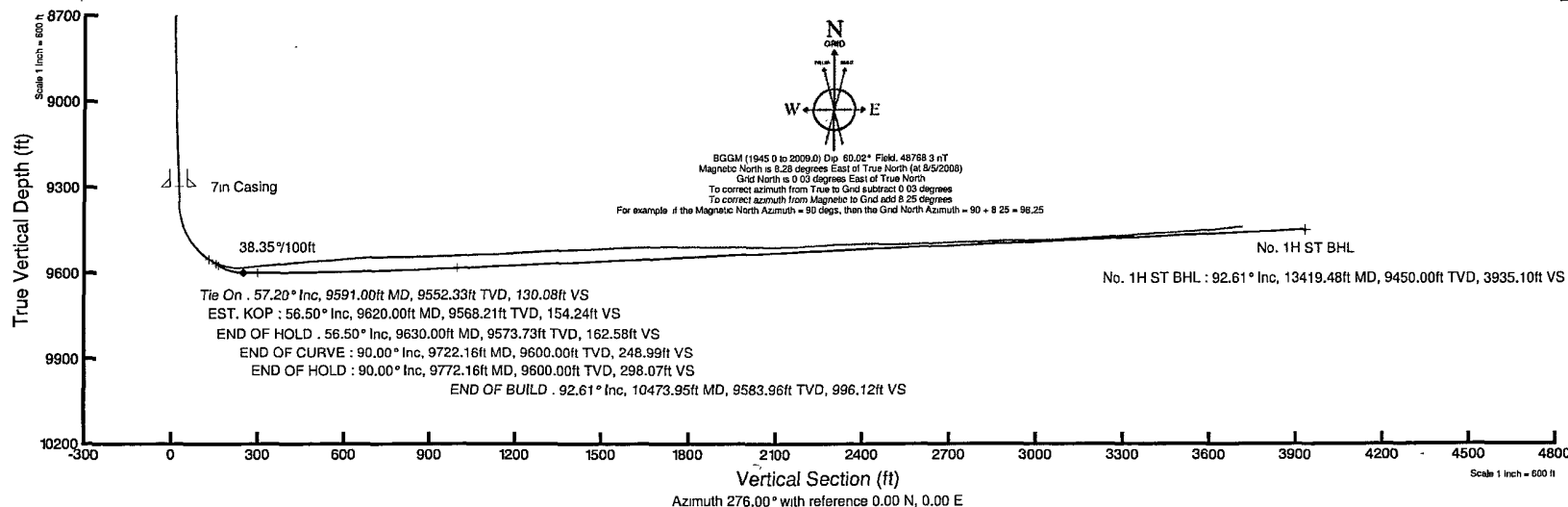
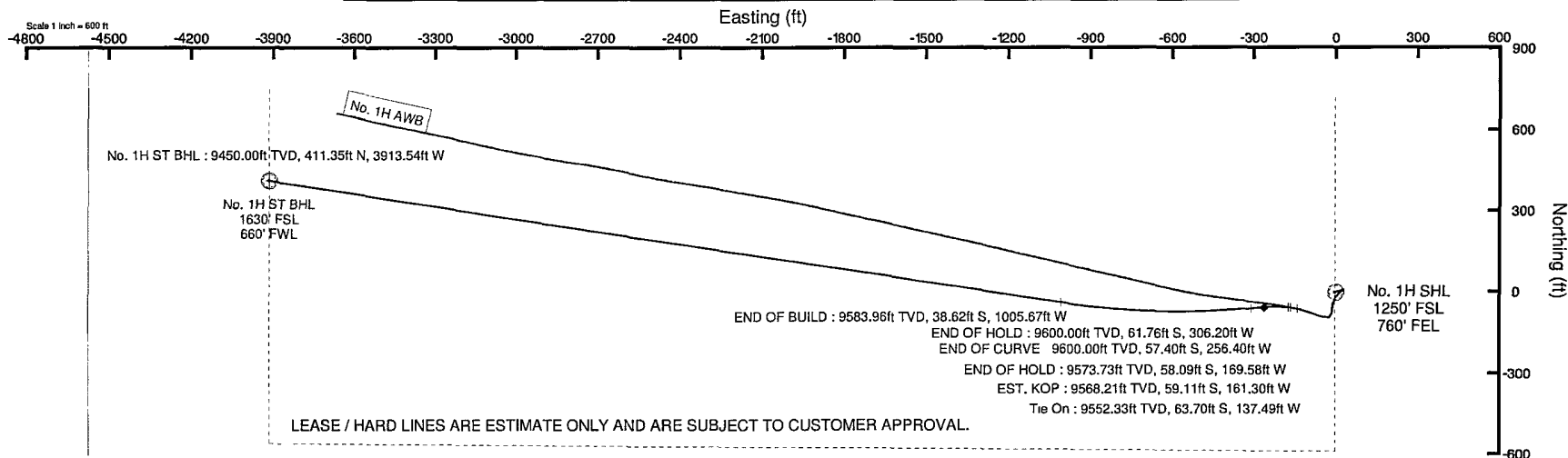
Depths are in feet

Created by: Victor Hernandez on 11/17/2008



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	9591.00	57.200	284.800	9552.33	-63.70	-137.49	28.50	130.08
EST. KOP	9620.00	56.500	277.000	9568.21	-59.11	-161.30	22.64	154.24
END OF HOLD	9630.00	56.500	277.000	9573.73	-58.09	-169.58	0.00	162.58
END OF CURVE	9722.16	90.000	265.000	9600.00	-57.40	-256.40	38.35	248.99
END OF HOLD	9772.16	90.000	265.000	9600.00	-61.76	-306.20	0.00	298.07
END OF BUILD	10473.95	92.607	278.796	9583.96	-38.62	-1005.67	2.00	996.12
No. 1H ST BHL	13419.48	92.607	278.796	9450.00	411.35	-3913.54	0.00	3935.10





Planned Wellpath Report

Plan #4
Page 1 of 7



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST PWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9498.00 MD

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999909	Report Generated	11/17/2008 at 2:49:28 PM
Convergence at slot	0.03° East	Database/Source file	WA_Midland/No. 1H_ST_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	559574.40	404301.30	32°06'41.363"N	104°16'27.952"W
Facility Reference Pt			559574.40	404301.30	32°06'41.363"N	104°16'27.952"W
Field Reference Pt			559574.40	404301.30	32°06'41.363"N	104°16'27.952"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (RT) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 1H SHL (RT) to Mean Sea Level	3307.00ft
Vertical Reference Pt	Rig on No. 1H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	276.00°



Planned Wellpath Report

Plan #4
Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST PWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9498.00 MD

WELLPATH DATA (146 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00	0.000	198.310	0.00	0.00	0.00	0.00	0.00	
100.00	0.450	198.310	100.00	0.08	-0.37	-0.12	0.45	
200.00	0.680	198.170	199.99	0.29	-1.31	-0.43	0.23	
300.00	0.580	228.890	299.99	0.76	-2.21	-1.00	0.35	
400.00	0.570	238.990	399.98	1.50	-2.80	-1.81	0.10	
500.00	0.580	266.320	499.98	2.40	-3.08	-2.74	0.27	
600.00	0.630	280.210	599.97	3.45	-3.02	-3.78	0.15	
700.00	0.580	290.930	699.97	4.48	-2.74	-4.80	0.12	
800.00	0.440	305.260	799.96	5.31	-2.34	-5.58	0.19	
900.00	0.400	297.770	899.96	5.97	-1.95	-6.21	0.07	
1000.00	0.120	317.840	999.96	6.37	-1.71	-6.59	0.29	
1100.00	0.840	71.060	1099.96	5.78	-1.40	-5.96	0.89	
1200.00	1.830	74.260	1199.93	3.64	-0.73	-3.73	0.99	
1300.00	1.620	77.740	1299.88	0.81	0.01	-0.81	0.23	
1400.00	2.350	82.670	1399.82	-2.53	0.57	-2.60	0.75	
1500.00	3.370	81.170	1499.70	-7.36	1.28	7.54	1.02	
1600.00	3.790	77.740	1599.50	-13.34	2.43	13.67	0.47	
1700.00	3.190	79.430	1699.31	-19.15	3.65	19.64	0.61	
1800.00	1.860	82.670	1799.22	-23.40	4.36	23.98	1.34	
1900.00	0.660	86.920	1899.19	-25.54	4.60	26.17	1.20	
2000.00	0.580	83.990	1999.18	-26.61	4.69	27.25	0.09	
2100.00	0.420	75.390	2099.18	-27.45	4.83	28.10	0.18	
2200.00	0.330	45.000	2199.18	-27.97	5.13	28.66	0.21	
2300.00	0.430	3.920	2299.18	-28.14	5.70	28.89	0.28	
2400.00	0.280	349.990	2399.17	-28.06	6.32	28.87	0.17	
2500.00	0.360	329.300	2499.17	-27.80	6.83	28.67	0.14	
2600.00	0.300	310.430	2599.17	-27.40	7.27	28.31	0.12	
2700.00	0.190	282.900	2699.17	-27.02	7.48	27.95	0.16	
2800.00	0.250	256.810	2799.17	-26.65	7.46	27.58	0.12	
2900.00	0.200	281.100	2899.17	-26.27	7.45	27.19	0.11	



Planned Wellpath Report

Plan #4
Page 3 of 7



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST PWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9498.00 MD

WELLPATH DATA (146 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3000.00	0.210	244.420	2999.17	-25.94	7.40	26.86	0.13	
3100.00	0.350	232.880	3099.17	-25.56	7.14	26.45	0.15	
3200.00	0.460	247.160	3199.16	-24.98	6.80	25.83	0.15	
3300.00	0.510	238.150	3299.16	-24.28	6.41	25.09	0.09	
3400.00	0.700	231.830	3399.15	-23.49	5.80	24.23	0.20	
3500.00	0.700	242.180	3499.15	-22.54	5.13	23.21	0.13	
3600.00	0.720	237.010	3599.14	-21.55	4.51	22.14	0.07	
3700.00	0.740	237.750	3699.13	-20.55	3.82	21.07	0.02	
3800.00	0.750	234.390	3799.12	-19.56	3.09	19.99	0.04	
3900.00	0.910	228.120	3899.11	-18.53	2.18	18.87	0.18	
4000.00	0.840	230.720	3999.10	-17.49	1.19	17.71	0.08	
4100.00	0.680	223.850	4099.09	-16.61	0.30	16.73	0.18	
4200.00	0.710	222.780	4199.08	-15.87	-0.59	15.90	0.03	
4300.00	0.750	218.990	4299.08	-15.14	-1.55	15.06	0.06	
4400.00	0.790	222.500	4399.07	-14.38	-2.57	14.19	0.06	
4500.00	0.740	213.490	4499.06	-13.67	-3.61	13.36	0.13	
4600.00	0.690	203.630	4599.05	-13.19	-4.70	12.77	0.13	
4700.00	0.680	209.610	4699.04	-12.77	-5.77	12.23	0.07	
4800.00	0.890	211.560	4799.03	-12.20	-6.95	11.53	0.21	
4900.00	0.980	210.560	4899.02	-11.51	-8.35	10.69	0.09	
5000.00	1.090	207.290	4999.00	-10.80	-9.93	9.82	0.12	
5100.00	1.060	206.310	5098.99	-10.14	-11.60	8.97	0.04	
5200.00	0.910	218.350	5198.97	-9.39	-13.05	8.07	0.25	
5300.00	0.810	221.380	5298.96	-8.56	-14.21	7.11	0.11	
5400.00	0.970	227.200	5398.95	-7.59	-15.31	6.02	0.18	
5500.00	0.770	244.010	5498.94	-6.46	-16.18	4.80	0.32	
5600.00	0.520	249.680	5598.93	-5.49	-16.63	3.77	0.26	
5700.00	0.730	230.860	5698.93	-4.63	-17.19	2.85	0.29	
5800.00	0.890	206.490	5798.92	-3.91	-18.29	2.01	0.38	
5900.00	1.450	197.830	5898.89	-3.38	-20.19	1.28	0.59	



Planned Wellpath Report

Plan #4
Page 4 of 7



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST PWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9498.00 MD

WELLPATH DATA (146 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6000.00	2.810	198.720	5998.82	-2.58	-23.72	0.10	1.36	
6100.00	3.200	196.350	6098.69	-1.54	-28.72	-1.47	0.41	
6200.00	2.580	192.240	6198.56	-0.79	-33.60	-2.73	0.65	
6300.00	2.410	201.210	6298.46	0.00	-37.75	-3.97	0.43	
6400.00	1.690	205.580	6398.40	1.05	-41.04	-5.37	0.74	
6500.00	1.230	203.650	6498.37	1.87	-43.36	-6.44	0.46	
6600.00	1.140	213.960	6598.34	2.66	-45.17	-7.42	0.23	
6700.00	1.340	198.200	6698.32	3.37	-47.10	-8.34	0.39	
6800.00	1.490	199.630	6798.29	3.93	-49.44	-9.15	0.15	
6900.00	1.330	163.830	6898.26	3.80	-51.78	-9.26	0.88	
7000.00	1.490	155.210	6998.23	2.69	-54.07	-8.39	0.27	
7100.00	0.900	177.010	7098.21	1.90	-56.04	-7.80	0.73	
7200.00	1.410	217.890	7198.19	2.43	-57.79	-8.52	0.94	
7300.00	1.760	219.960	7298.15	3.94	-59.94	-10.26	0.35	
7400.00	0.830	213.910	7398.13	5.14	-61.72	-11.65	0.94	
7500.00	0.410	184.800	7498.12	5.47	-62.68	-12.09	0.51	
7600.00	0.460	164.450	7598.12	5.31	-63.42	-12.01	0.16	
7700.00	1.680	166.570	7698.10	4.68	-65.23	-11.56	1.22	
7800.00	1.720	168.710	7798.05	3.74	-68.13	-10.93	0.08	
7900.00	1.950	188.680	7898.00	3.38	-71.28	-10.89	0.68	
8000.00	2.070	182.810	7997.94	3.36	-74.77	-11.23	0.24	
8100.00	2.150	192.230	8097.88	3.46	-78.41	-11.72	0.36	
8200.00	1.830	205.000	8197.82	4.18	-81.69	-12.79	0.54	
8300.00	1.740	209.570	8297.77	5.31	-84.45	-14.22	0.17	
8400.00	1.540	213.360	8397.73	6.53	-86.90	-15.70	0.23	
8500.00	1.370	212.410	8497.69	7.68	-89.03	-17.08	0.17	
8600.00	1.260	207.700	8597.67	8.62	-91.01	-18.24	0.15	
8700.00	1.430	217.100	8697.64	9.67	-92.98	-19.50	0.28	
8800.00	1.510	220.320	8797.61	11.06	-94.98	-21.10	0.11	
8900.00	1.070	258.000	8897.58	12.69	-96.18	-22.87	0.93	



Planned Wellpath Report

Plan #4
Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST PWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9498.00 MD

WELLPATH DATA (146 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
9000.00	1.320	276.280	8997.56	14.73	-96.25	-24.93	0.45	
9100.00	1.710	273.300	9097.53	17.37	-96.03	-27.56	0.40	
9200.00	1.780	279.900	9197.48	20.41	-95.68	-30.58	0.21	
9300.00	2.210	281.130	9297.42	23.88	-95.04	-34.00	0.43	
9367.00	2.210	281.130	9364.37	26.46	-94.54	-36.54	0.00	
9403.00	11.700	266.400	9400.07	30.76	-94.64	-40.87	26.61	
9435.00	18.000	289.800	9431.01	38.77	-93.16	-48.78	26.81	
9467.00	26.900	290.300	9460.55	50.61	-88.97	-60.24	27.82	
9498.00	34.200	289.600	9487.23	65.90	-83.61	-75.05	23.58	
9527.00	40.900	289.300	9510.21	83.08	-77.73	-91.70	23.11	
9559.00	48.300	287.300	9532.98	105.02	-70.70	-113.03	23.54	
9591.00	57.200	284.800	9552.33	130.08	-63.70	-137.49	28.50	Tie On
9620.00	56.500	277.000	9568.21	154.24	-59.11	-161.30	22.64	EST. KOP
9630.00	56.500	277.000	9573.73	162.58	-58.09	-169.58	0.00	END OF HOLD
9691.00†	78.605	268.630	9596.91	218.43	-55.67	-225.49	38.35	
9722.16	90.000	265.000	9600.00	248.99	-57.40	-256.40	38.35	END OF CURVE
9772.16	90.000	265.000	9600.00	298.07	-61.76	-306.20	0.00	END OF HOLD
9791.00†	90.071	265.370	9599.99	316.57	-63.34	-324.97	2.00	
9891.00†	90.446	267.335	9599.54	415.15	-69.70	-424.77	2.00	
9991.00†	90.820	269.299	9598.43	514.24	-72.64	-524.71	2.00	
10091.00†	91.193	271.265	9596.68	613.73	-72.15	-624.69	2.00	
10191.00†	91.565	273.230	9594.27	713.48	-68.23	-724.58	2.00	
10291.00†	91.936	275.197	9591.21	813.38	-60.89	-824.26	2.00	
10391.00†	92.304	277.164	9587.51	913.30	-50.13	-923.60	2.00	
10473.95	92.607	278.796	9583.96	996.12	-38.62	-1005.67	2.00	END OF BUILD
10491.00†	92.607	278.796	9583.19	1013.14	-36.02	-1022.50	0.00	
10591.00†	92.607	278.796	9578.64	1112.91	-20.74	-1121.22	0.00	
10691.00†	92.607	278.796	9574.09	1212.69	-5.47	-1219.95	0.00	
10791.00†	92.607	278.796	9569.54	1312.47	9.81	-1318.67	0.00	
10891.00†	92.607	278.796	9564.99	1412.25	25.09	-1417.39	0.00	



Planned Wellpath Report

Plan #4

Page 6 of 7



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST PWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9498.00 MD

WELLPATH DATA: (146 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10991.00†	92.607	278.796	9560.45	1512.02	40.36	-1516.11	0.00	
11091.00†	92.607	278.796	9555.90	1611.80	55.64	-1614.83	0.00	
11191.00†	92.607	278.796	9551.35	1711.58	70.92	-1713.55	0.00	
11291.00†	92.607	278.796	9546.80	1811.36	86.19	-1812.28	0.00	
11391.00†	92.607	278.796	9542.25	1911.13	101.47	-1911.00	0.00	
11491.00†	92.607	278.796	9537.71	2010.91	116.74	-2009.72	0.00	
11591.00†	92.607	278.796	9533.16	2110.69	132.02	-2108.44	0.00	
11691.00†	92.607	278.796	9528.61	2210.47	147.30	-2207.16	0.00	
11791.00†	92.607	278.796	9524.06	2310.24	162.57	-2305.88	0.00	
11891.00†	92.607	278.796	9519.51	2410.02	177.85	-2404.61	0.00	
11991.00†	92.607	278.796	9514.97	2509.80	193.13	-2503.33	0.00	
12091.00†	92.607	278.796	9510.42	2609.58	208.40	-2602.05	0.00	
12191.00†	92.607	278.796	9505.87	2709.36	223.68	-2700.77	0.00	
12291.00†	92.607	278.796	9501.32	2809.13	238.96	-2799.49	0.00	
12391.00†	92.607	278.796	9496.77	2908.91	254.23	-2898.21	0.00	
12491.00†	92.607	278.796	9492.23	3008.69	269.51	-2996.93	0.00	
12591.00†	92.607	278.796	9487.68	3108.47	284.78	-3095.66	0.00	
12691.00†	92.607	278.796	9483.13	3208.24	300.06	-3194.38	0.00	
12791.00†	92.607	278.796	9478.58	3308.02	315.34	-3293.10	0.00	
12891.00†	92.607	278.796	9474.03	3407.80	330.61	-3391.82	0.00	
12991.00†	92.607	278.796	9469.49	3507.58	345.89	-3490.54	0.00	
13091.00†	92.607	278.796	9464.94	3607.35	361.17	-3589.26	0.00	
13191.00†	92.607	278.796	9460.39	3707.13	376.44	-3687.99	0.00	
13291.00†	92.607	278.796	9455.84	3806.91	391.72	-3786.71	0.00	
13391.00†	92.607	278.796	9451.30	3906.69	407.00	-3885.43	0.00	
13419.48	92.607	278.796	9450.00	3935.10	411.35	-3913.54	0.00	No. 1H ST BHL



Planned Wellpath Report

Plan #4
Page 7 of 7



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST PWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9498.00 MD

HOLE & CASING SECTIONS Ref Wellbore: No. 1H ST PWB Ref Wellpath: Plan #4									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
7in Casing	0.00	9300.00	9300.00	0.00	9297.42	0.00	0.00	-95.04	-34.00
6.125in Open Hole	9300.00	9591.00	291.00	9297.42	9552.33	-95.04	-34.00	-63.70	-137.49
6.125in Open Hole	9591.00	13419.48	3828.48	9552.33	NA	-63.70	-137.49	NA	NA

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 1H ST BHL	13419.48	9450.00	411.35	-3913.54	555661.22	404712.61	32°06'45.453"N	104°17'13.450"W	point

SURVEY PROGRAM Ref Wellbore: No. 1H ST PWB Ref Wellpath: Plan #4				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	9300.00	Gyrodata relative depth - Continuous gyro		No. 1 AWB
9300.00	9591.00	NaviTrak (Standard)		No. 1H AWB
9591.00	13419.48	NaviTrak (Standard)		No. 1H ST PWB