



**DRILLING SERVICES
END OF WELL REPORT
FOR
Mike Mestas
Cimarex Energy Co
White City 14 Federal 10
Eddy County, NM**

Weatherford Drilling Services job start date : 8-24-2011

Weatherford Drilling Services job end date : 9-9-2011

Presented By:

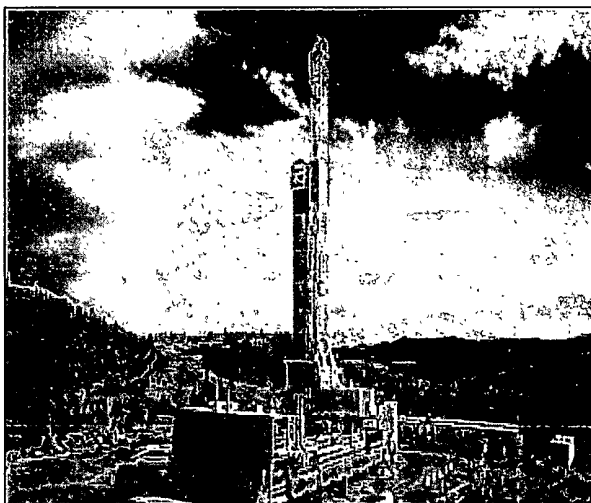
Damien Tarpley
Area Manager

Ryan Davis
Account Manager

Orry Armendariz
Directional Drilling Coordinator

Jesse Aguilar
MWD Coordinator

Cactus 110





Cimarex Energy Co
White City 14 Federal 10
Eddy County, NM

Section 1

Weatherford (Wft) Final Definitive

Plot & Survey



10000 West County Road 116
P.O. Box 61028
Midland, Texas 79711
Phone (432) 561-8892

September 13, 2011

Mike Mestas

600 N Marienfeld
Midland, TX 79701

Reference Well Name : White City 14 Federal 10
Location : Eddy County, NM
Wft Job # : 4023697
Rig : Cactus 110

Dear Mr. Mestas

Thank you for allowing us the opportunity to provide our services on your White City 14 Federal 10 in Eddy County, NM.

Please find the final End Of Well (EOW) report enclosed behind this coverletter.

The EOW report contains the following information :

Section 1 - Weatherford (Wft) Final Definitive Survey & 8.5" x 11".

* Note: This survey contains the Directional Survey's obtained by Weatherford Drilling Services via Weatherford MWD Services, and any gyro survey needed for Tie On (if required).

Section 2- Days vs. Feet Drilled (24 hrs) and Days vs. Depth Graphs

Section 3- Wft Gamma Logs

Section 4 - Wft Final BHA reports (BHA Graphic Reports, BHA Detail Reports, Motor Evaluation Reports, and BHA Slide Reports).

Section 5 - Wft Final Daily Drilling reports.

Section 6 - Wft Personnel list with contact numbers.

We at *Weatherford Drilling Services'* understand the importance of this project to you and hope that you were satisfied with our Directional Drilling and MWD services provided.

Please feel free to contact me if you have any questions.

Sincerely,

Damien Tarpley



White City 14 Federal 10
Eddy Co., NM

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	9218.10	0.19	69.07	9215.74	-54.15	60.91	0.00	0.00	54.88	
2	9380.53	0.19	69.07	9378.16	-53.96	61.42	0.00	0.00	54.70	
3	9830.89	90.00	181.09	9665.00	-340.41	56.83	20.00	112.02	341.07	
4	13612.81	90.00	181.09	9665.00	-4121.64	-15.34	0.00	0.00	4121.16	PBHL

WELL DETAILS

Name+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
10	0.00	0.00	413114.50	561062.60	32°08'08.564N	104°16'10.600W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	9665.00	-4121.64	-15.34	408992.86	561047.26	Rectangle (3781x150)

SITE DETAILS

White City 14 Federal 10
Site Centre Northing: 413114.50
Easting: 561062.60
Ground Level: 3350.00
Positional Uncertainty: 0.00
Convergence: 0.03

FIELD DETAILS

Eddy Co., NM (NAD 83)
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

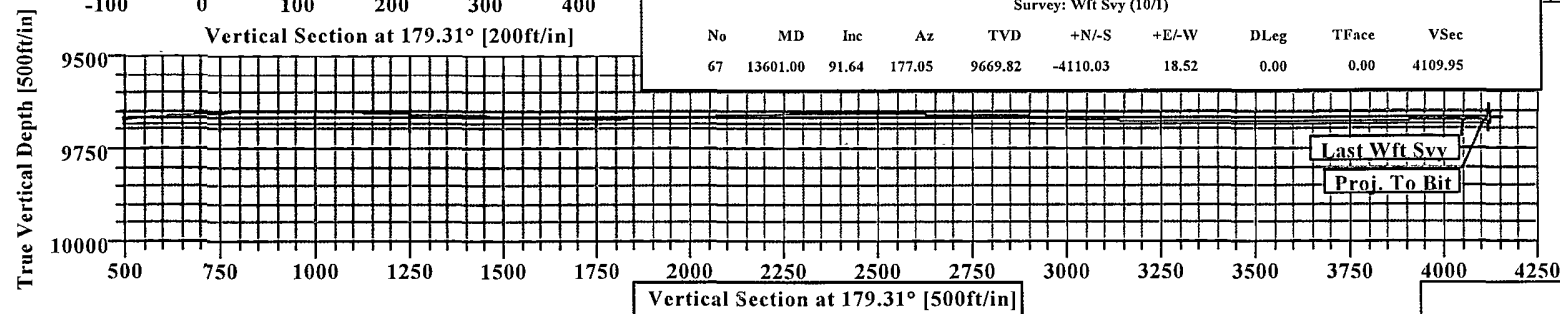
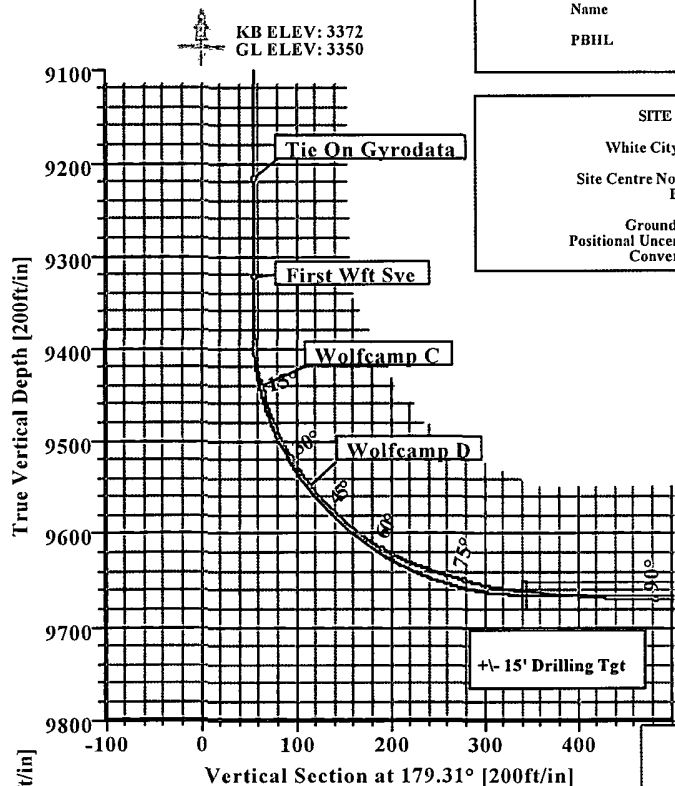
LEGEND

- 10, I, Plan #4
- 10, I, Gyro
- 1
- Wft Svy



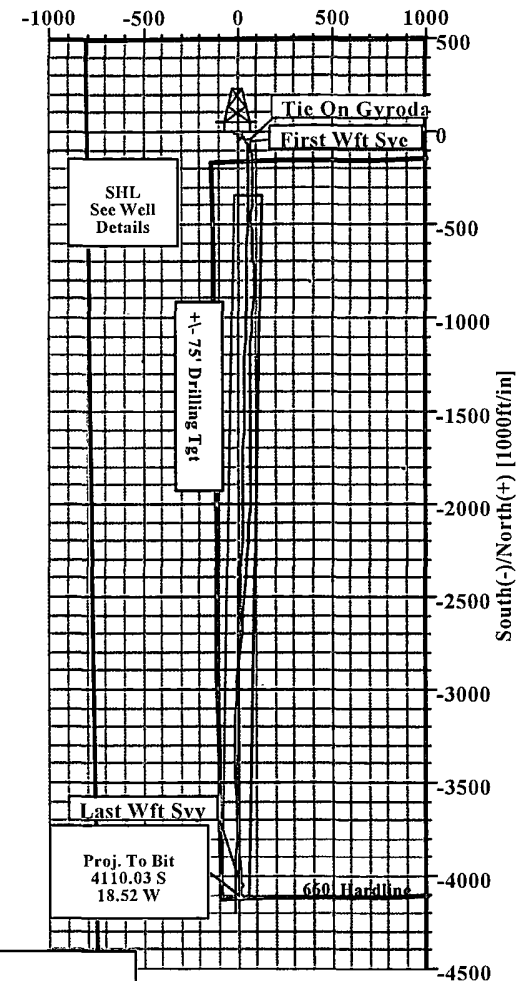
Total Correction to Grid North: 7.85°

Azimuths to Grid North
True North: -0.03°
Magnetic North: 7.85°
Magnetic Field
Strength: 48496nT
Dip Angle: 59.98°
Date: 8/1/2011
Model: IGRF2010



Weatherford

West(-)/East(+) [1000ft/in]



Survey: Wft Svy (10/1)

Created By: Russell W. Joyner

Date: 9/12/2011



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Cimarex Energy Field: Eddy Co., NM (NAD 83) Site: White City 14 Federal 10 Well: 10 Wellpath: 1	Date: 9/12/2011 Time: 14:03:35 Page: 1 Co-ordinate(NE) Reference: Well: 10, Grid North Vertical (TVD) Reference: SITE 3372.0 Section (VS) Reference: Well (0.00N,0.00E,179.31Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Survey: Wft Svy	Start Date: 8/29/2011
Company: Weatherford International Ltd.	Engineer: Russell W. Joyner
Tool: MWD,MWD - Standard	Tied-to: User Defined

Field: Eddy Co., NM (NAD 83)	
Map System: US State Plane Coordinate System 1983	Map Zone: New Mexico, Eastern Zone
Geo Datum: GRS 1980	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: IGRF2010

Site: White City 14 Federal 10	
Site Position: From: Map Position Uncertainty: 0.00 ft Ground Level: 3350.00 ft	Northing: 413114.50 ft Easting: 561062.60 ft Latitude: 32 8 8.564 N Longitude: 104 16 10.600 W North Reference: Grid Grid Convergence: 0.03 deg

Well: 10	Slot Name:
Well Position: +N/-S 0.00 ft Northing: 413114.50 ft Latitude: 32 8 8.564 N +E/-W 0.00 ft Easting : 561062.60 ft Longitude: 104 16 10.600 W Position Uncertainty: 0.00 ft	

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 8/1/2011	Above System Datum: Mean Sea Level
Field Strength: 48496 nT	Declination: 7.88 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 59.98 deg
ft	ft
0.00	0.00 0.00 179.31

Survey										
MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
9218.10	0.19	69.07	9215.74	-54.15	60.91	0.00	54.88	413060.35	561123.51	Tie On Gyrodata
9324.00	1.30	94.89	9321.62	-54.19	62.28	1.07	54.94	413060.31	561124.88	First Wft Sve
9356.00	1.51	100.61	9353.62	-54.30	63.05	0.79	55.06	413060.20	561125.65	
9388.00	3.50	143.35	9385.59	-55.16	64.05	8.13	55.93	413059.34	561126.65	
9420.00	9.09	163.41	9417.38	-58.37	65.36	18.51	59.16	413056.13	561127.96	
9451.00	15.35	172.62	9447.67	-64.80	66.58	21.09	65.59	413049.70	561129.18	
9483.00	21.09	172.55	9478.05	-74.71	67.87	17.94	75.53	413039.79	561130.47	
9515.00	27.97	174.19	9507.15	-87.90	69.38	21.60	88.73	413026.60	561131.98	
9546.00	33.49	173.25	9533.78	-103.64	71.13	17.87	104.49	413010.86	561133.73	
9578.00	40.09	173.23	9559.40	-122.66	73.38	20.63	123.54	412991.84	561135.98	
9610.00	46.81	174.28	9582.61	-144.53	75.76	21.12	145.43	412969.97	561138.36	
9641.00	53.79	175.68	9602.40	-168.27	77.83	22.78	169.20	412946.23	561140.43	
9672.00	61.60	176.97	9618.96	-194.40	79.50	25.44	195.34	412920.10	561142.10	
9704.00	68.70	179.72	9632.40	-223.40	80.31	23.52	224.35	412891.10	561142.91	
9736.00	72.73	181.70	9642.97	-253.60	79.93	13.88	254.54	412860.90	561142.53	
9767.00	75.55	181.87	9651.44	-283.40	79.00	9.11	284.33	412831.10	561141.60	
9799.00	80.77	181.69	9658.00	-314.69	78.03	16.32	315.61	412799.81	561140.63	
9830.00	84.85	183.15	9661.88	-345.41	76.73	13.97	346.31	412769.09	561139.33	
9861.00	84.85	183.07	9664.66	-376.24	75.06	0.26	377.12	412738.26	561137.66	
9893.00	85.76	183.08	9667.28	-408.09	73.35	2.84	408.94	412706.41	561135.95	
9924.00	86.61	180.97	9669.35	-439.00	72.25	7.32	439.84	412675.50	561134.85	
9956.00	88.85	179.58	9670.61	-470.97	72.10	8.24	471.81	412643.53	561134.70	
9988.00	91.99	178.06	9670.38	-502.96	72.76	10.90	503.80	412611.54	561135.36	
10019.00	93.11	177.73	9669.00	-533.91	73.90	3.77	534.76	412580.59	561136.50	



Weatherford International Ltd.

WFT Survey Report X & Y's



Weatherford

Company: Cimarex Energy
Field: Eddy Co., NM (NAD 83)
Site: White City 14 Federal 10
Well: 10
Wellpath: 1

Date: 9/12/2011 Time: 14:03:35 Page: 2
Co-ordinate(NE) Reference: Well: 10, Grid North
Vertical (TVD) Reference: SITE 3372.0
Section (VS) Reference: Well (0 00N,0 00E,179.31Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
10051.00	93.74	177.27	9667.09	-565.82	75.29	2.44	566.69	412548.68	561137.89	
10082.00	93.89	176.09	9665.02	-596.70	77.08	3.83	597.58	412517.80	561139.68	
10144.00	94.38	177.34	9660.55	-658.43	80.63	2.16	659.36	412456.07	561143.23	
10176.00	94.03	176.93	9658.21	-690.31	82.22	1.68	691.25	412424.19	561144.82	
10207.00	93.81	178.07	9656.09	-721.21	83.57	3.74	722.16	412393.29	561146.17	
10239.00	93.74	179.03	9653.98	-753.13	84.38	3.00	754.09	412361.37	561146.98	
10271.00	93.12	179.38	9652.07	-785.06	84.82	2.22	786.03	412329.44	561147.42	
10365.00	88.92	181.63	9650.39	-879.02	83.99	5.07	879.97	412235.48	561146.59	
10461.00	90.66	183.78	9650.75	-974.90	79.46	2.88	975.79	412139.60	561142.06	
10555.00	88.29	182.71	9651.61	-1068.74	74.14	2.77	1069.55	412045.76	561136.74	
10618.00	87.66	182.61	9653.83	-1131.63	71.22	1.01	1132.41	411982.87	561133.82	
10650.00	87.45	182.30	9655.20	-1163.57	69.85	1.17	1164.33	411950.93	561132.45	
10745.00	87.73	180.78	9659.19	-1258.45	67.30	1.63	1259.17	411856.05	561129.90	
10840.00	89.06	179.82	9661.85	-1353.41	66.80	1.73	1354.12	411761.09	561129.40	
10935.00	88.71	179.77	9663.70	-1448.39	67.14	0.37	1449.10	411666.11	561129.74	
11030.00	88.43	179.72	9666.07	-1543.36	67.56	0.30	1544.06	411571.14	561130.16	
11219.00	89.48	179.87	9669.52	-1732.33	68.24	0.56	1733.02	411382.17	561130.84	
11314.00	90.66	180.55	9669.40	-1827.32	67.89	1.43	1828.01	411287.18	561130.49	
11410.00	90.95	181.24	9668.06	-1923.30	66.39	0.78	1923.96	411191.20	561128.99	
11505.00	91.78	182.16	9665.79	-2018.23	63.58	1.30	2018.85	411096.27	561126.18	
11599.00	92.63	182.61	9662.18	-2112.08	59.67	1.02	2112.64	411002.42	561122.27	
11694.00	91.15	182.74	9659.04	-2206.92	55.24	1.56	2207.43	410907.58	561117.84	
11789.00	91.08	183.95	9657.19	-2301.74	49.69	1.28	2302.17	410812.76	561112.29	
11884.00	89.83	184.20	9656.44	-2396.49	42.94	1.34	2396.84	410718.01	561105.54	
11978.00	90.03	184.16	9656.55	-2490.24	36.09	0.22	2490.50	410624.26	561098.69	
12073.00	88.35	184.40	9657.90	-2584.97	29.00	1.79	2585.13	410529.53	561091.60	
12168.00	89.83	185.13	9659.41	-2679.62	21.11	1.74	2679.68	410434.88	561083.71	
12262.00	89.69	185.53	9659.80	-2773.21	12.38	0.45	2773.16	410341.29	561074.98	
12357.00	87.30	184.40	9662.29	-2867.82	4.16	2.78	2867.66	410246.68	561066.76	
12451.00	86.74	183.63	9667.18	-2961.46	-2.41	1.01	2961.21	410153.04	561060.19	
12546.00	87.80	182.97	9671.71	-3056.19	-7.87	1.31	3055.88	410058.31	561054.73	
12640.00	88.57	181.59	9674.68	-3150.07	-11.61	1.68	3149.70	409964.43	561050.99	
12703.00	89.19	181.27	9675.92	-3213.03	-13.18	1.11	3212.64	409901.47	561049.42	
12798.00	90.04	180.49	9676.55	-3308.02	-14.64	1.21	3307.60	409806.48	561047.96	
12893.00	89.40	180.08	9677.02	-3403.02	-15.11	0.80	3402.59	409711.48	561047.49	
12988.00	89.47	178.19	9677.95	-3498.00	-13.68	1.99	3497.58	409616.50	561048.92	
13083.00	89.96	177.15	9678.43	-3592.92	-9.82	1.21	3592.54	409521.58	561052.78	
13178.00	89.83	176.53	9678.60	-3687.77	-4.58	0.67	3687.45	409426.73	561058.02	
13273.00	91.09	176.64	9677.84	-3782.60	1.08	1.33	3782.34	409331.90	561063.68	
13367.00	91.86	177.25	9675.42	-3876.43	6.09	1.04	3876.22	409238.07	561068.69	
13462.00	90.80	176.68	9673.21	-3971.27	11.11	1.27	3971.12	409143.23	561073.71	
13542.00	91.64	177.05	9671.51	-4051.13	15.49	1.15	4051.02	409063.37	561078.09	Last Wft Svy
13601.00	91.64	177.05	9669.82	-4110.03	18.52	0.00	4109.95	409004.47	561081.12	Proj. To Bit

Annotation

MD ft	TVD ft	
9218.10	9215.74	Tie On Gyrodata
9324.00	9321.62	First Wft Svy
13542.00	9671.51	Last Wft Svy
13601.00	9669.82	Proj. To Bit

A Gyrodata Directional Survey

for

-----CIMAREX

Lease: WHITE CITY 14 Well: FED 10-H, 4.5 INCH DRILLPIPE
Location: CACTUS 110, EDDY COUNTY, NEW MEXICO

Job Number: MD0811GDM368

Run Date: 22 Aug 2011

Surveyor: Will Skelton, Chase Baron

Calculation Method: MINIMUM CURVATURE

Azimuth Correction:

Gyro: -0.03000 deg to Grid North

Depth Reference: Rotary Table

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Survey surface coordinates obtained from: Well-Plan/Plot

Survey Latitude: 30.124384 deg. N Longitude: 104.269455 deg. W

Horizontal Coordinates Calculated from Well Head Location

A Gyrodata Directional Survey

CIMAREX

Lease: WHITE CITY 14 Well: FED 10-H, 4.5 INCH DRILLPIPE

Location: CACTUS 110, EDDY COUNTY, NEW MEXICO

Job Number: MD0811GDM368

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	0.00	0.00	0.0 0.0	0.00 N 0.00 E

0 TO 9218 FT RATE GYROSCOPIC MULTISHOT DROP SURVEY RUN INSIDE 4.5 INCH DRILLPIPE						
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO CACTUS 110 AND R.K.B. HEIGHT OF 22 FT.						

100.00	0.96	248.24	0.96	100.00	0.8 248.2	0.31 S 0.78 W
200.00	0.57	269.38	0.48	199.99	2.1 253.0	0.63 S 2.05 W
300.00	0.70	247.77	0.27	299.98	3.2 254.5	0.86 S 3.12 W
368.20	0.70	247.41	0.01	368.18	4.1 253.1	1.18 S 3.89 W
465.60	1.20	248.87	0.51	465.56	5.7 251.7	1.78 S 5.39 W
563.00	1.33	249.47	0.13	562.94	7.8 251.0	2.54 S 7.40 W
660.40	1.24	248.58	0.09	660.31	10.0 250.6	3.32 S 9.44 W
757.80	1.24	246.99	0.04	757.69	12.1 250.1	4.12 S 11.39 W
855.20	1.10	247.44	0.14	855.07	14.1 249.7	4.89 S 13.22 W
952.60	0.38	204.68	0.88	952.46	15.3 248.7	5.54 S 14.22 W
1050.00	0.64	124.37	0.71	1049.86	15.2 246.2	6.14 S 13.91 W
1147.40	0.69	116.63	0.11	1147.25	14.6 242.6	6.71 S 12.93 W
1244.80	1.60	98.19	1.00	1244.63	13.2 237.1	7.17 S 11.06 W
1342.20	2.52	93.23	0.96	1341.97	10.7 225.4	7.48 S 7.58 W
1439.60	3.24	96.35	0.76	1439.24	8.4 198.9	7.91 S 2.70 W
1537.00	2.89	97.59	0.37	1536.51	8.9 163.9	8.54 S 2.46 E
1634.40	2.35	99.85	0.56	1633.80	11.5 143.3	9.20 S 6.87 E

A Gyrodata Directional Survey

CIMAREX

Lease: WHITE CITY 14 Well: FED 10-H, 4.5 INCH DRILLPIPE

Location: CACTUS 110, EDDY COUNTY, NEW MEXICO

Job Number: MD0811GDM368

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
1731.80	1.83	97.65	0.54	1731.14	14.2 133.2	9.75 S 10.37 E
1829.20	1.53	98.59	0.31	1828.50	16.7 127.6	10.15 S 13.20 E
1926.60	1.27	98.42	0.27	1925.87	18.8 124.0	10.51 S 15.56 E
2024.00	1.13	95.10	0.16	2023.25	20.6 121.4	10.75 S 17.58 E
2121.40	1.03	94.94	0.10	2120.63	22.3 119.3	10.91 S 19.41 E
2218.80	0.92	97.33	0.12	2218.01	23.8 117.8	11.08 S 21.06 E
2316.20	0.80	98.88	0.13	2315.40	25.2 116.6	11.29 S 22.50 E
2413.60	0.67	97.90	0.13	2412.80	26.4 115.8	11.47 S 23.74 E
2511.00	0.49	98.36	0.18	2510.19	27.3 115.2	11.61 S 24.72 E
2608.40	0.35	116.53	0.20	2607.59	28.0 114.9	11.80 S 25.39 E
2705.80	0.32	115.86	0.03	2704.99	28.6 115.0	12.06 S 25.90 E
2803.20	0.28	113.12	0.04	2802.38	29.1 115.0	12.27 S 26.37 E
2900.60	0.26	113.57	0.02	2899.78	29.5 114.9	12.45 S 26.79 E
2998.00	0.48	116.02	0.23	2997.18	30.2 114.9	12.72 S 27.36 E
3095.40	0.33	131.59	0.19	3094.58	30.8 115.1	13.08 S 27.94 E
3192.80	0.24	148.10	0.12	3191.98	31.3 115.4	13.44 S 28.25 E
3290.20	0.19	174.87	0.11	3289.38	31.5 115.9	13.78 S 28.38 E
3387.60	0.19	192.75	0.06	3386.78	31.7 116.4	14.09 S 28.35 E
3485.00	0.42	162.59	0.28	3484.18	32.0 117.2	14.59 S 28.43 E
3582.40	0.56	188.30	0.26	3581.57	32.4 118.4	15.40 S 28.46 E
3679.80	0.60	186.10	0.05	3678.97	32.7 120.0	16.38 S 28.34 E
3777.20	0.53	186.53	0.07	3776.36	33.1 121.6	17.34 S 28.24 E

A Gyrodata Directional Survey

CIMAREX

Lease: WHITE CITY 14 Well: FED 10-H, 4.5 INCH DRILLPIPE

Location: CACTUS 110, EDDY COUNTY, NEW MEXICO

Job Number: MD0811GDM368

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
3874.60	0.38	206.09	0.22	3873.76	33.4 122.8	18.07 S 28.04 E
3972.00	0.50	196.87	0.14	3971.16	33.5 124.1	18.77 S 27.78 E
4069.40	0.63	168.21	0.31	4068.55	34.0 125.4	19.70 S 27.76 E
4166.80	0.47	155.62	0.20	4165.95	34.8 126.3	20.59 S 28.04 E
4264.20	0.51	159.61	0.05	4263.34	35.5 127.0	21.36 S 28.35 E
4361.60	0.46	175.37	0.15	4360.74	36.1 127.8	22.16 S 28.54 E
4459.00	0.54	171.78	0.09	4458.14	36.7 128.8	23.00 S 28.63 E
4556.40	0.60	166.73	0.08	4555.53	37.5 129.7	23.95 S 28.82 E
4653.80	0.52	165.30	0.08	4652.93	38.2 130.6	24.88 S 29.04 E
4751.20	0.49	171.92	0.07	4750.32	38.9 131.4	25.71 S 29.22 E
4848.60	0.44	169.46	0.06	4847.72	39.5 132.1	26.49 S 29.34 E
4946.00	0.64	163.82	0.21	4945.12	40.3 132.8	27.39 S 29.56 E
5043.40	0.70	165.07	0.06	5042.51	41.3 133.6	28.48 S 29.87 E
5140.80	0.71	154.07	0.14	5139.90	42.3 134.3	29.60 S 30.28 E
5238.20	0.76	159.42	0.09	5237.29	43.5 135.0	30.75 S 30.78 E
5335.60	0.44	156.92	0.33	5334.69	44.4 135.5	31.70 S 31.15 E
5433.00	0.54	137.29	0.20	5432.08	45.2 135.7	32.38 S 31.61 E
5530.40	0.34	153.10	0.24	5529.48	46.0 135.8	32.97 S 32.05 E
5627.80	0.07	57.55	0.36	5626.88	46.3 135.8	33.20 S 32.23 E
5725.20	0.23	324.72	0.25	5724.28	46.1 135.7	33.01 S 32.17 E
5822.60	0.26	260.94	0.27	5821.68	45.8 135.9	32.88 S 31.84 E

A Gyrodata Directional Survey

CIMAREX

Lease: WHITE CITY 14 Well: FED 10-H, 4.5 INCH DRILLPIPE

Location: CACTUS 110, EDDY COUNTY, NEW MEXICO

Job Number: MD0811GDM368

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
5920.00	1.11	213.46	0.98	5919.07	45.9 137.3	33.70 S 31.10 E
6017.40	0.59	234.05	0.61	6016.46	46.0 139.1	34.79 S 30.17 E
6212.20	1.48	270.69	0.55	6211.23	44.4 142.8	35.34 S 26.84 E
6309.60	2.53	263.86	1.10	6308.57	42.6 146.6	35.56 S 23.45 E
6407.00	2.47	271.59	0.35	6405.88	40.6 151.7	35.73 S 19.21 E
6504.40	2.60	268.62	0.19	6503.18	38.7 157.4	35.73 S 14.91 E
6601.80	1.66	256.79	1.06	6600.51	37.8 162.6	36.10 S 11.32 E
6699.20	0.97	279.37	0.87	6697.89	37.4 165.9	36.29 S 9.14 E
6796.60	0.20	244.05	0.84	6795.28	37.1 167.3	36.23 S 8.17 E
6894.00	0.06	162.98	0.21	6892.68	37.2 167.5	36.35 S 8.03 E
6991.40	0.39	143.91	0.34	6990.08	37.6 167.3	36.67 S 8.24 E
7088.80	1.15	97.08	0.95	7087.47	38.2 165.8	37.06 S 9.41 E
7186.20	1.80	89.63	0.69	7184.84	39.0 162.2	37.17 S 11.91 E
7283.60	2.48	85.63	0.71	7282.17	40.1 157.2	37.00 S 15.54 E
7381.00	2.71	72.58	0.65	7379.47	41.2 151.2	36.15 S 19.84 E
7478.40	2.79	84.57	0.60	7476.76	42.9 145.3	35.23 S 24.39 E
7575.80	1.72	81.75	1.10	7574.08	44.8 141.0	34.80 S 28.20 E
7673.20	2.76	90.66	1.12	7671.41	47.1 137.3	34.62 S 31.99 E
7770.60	2.80	102.28	0.58	7768.69	50.8 133.8	35.15 S 36.66 E
7868.00	2.76	118.06	0.78	7865.98	55.1 131.8	36.76 S 41.06 E
7965.40	2.23	126.91	0.67	7963.29	59.3 131.1	39.00 S 44.64 E
8062.80	1.78	129.68	0.47	8060.63	62.7 131.0	41.10 S 47.32 E

A Gyrodata Directional Survey

CIMAREX

Lease: WHITE CITY 14 Well: FED 10-H, 4.5 INCH DRILLPIPE

Location: CACTUS 110, EDDY COUNTY, NEW MEXICO

Job Number: MD0811GDM368

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	AZIMUTH deg.	HORIZONTAL COORDINATES feet
8160.20	1.36	159.88	0.94	8157.99	65.2	131.4	43.16 S 48.88 E
8257.60	1.26	157.16	0.12	8255.37	67.2	132.3	45.23 S 49.70 E
8355.00	0.99	157.24	0.28	8352.75	68.9	133.0	46.99 S 50.44 E
8452.40	0.91	123.25	0.58	8450.14	70.5	133.1	48.19 S 51.41 E
8549.80	1.29	109.30	0.47	8547.52	72.2	132.7	48.98 S 53.09 E
8647.20	1.24	131.06	0.49	8644.90	74.3	132.3	50.03 S 54.92 E
8744.60	1.29	129.03	0.07	8742.27	76.4	132.3	51.41 S 56.57 E
8839.30	1.02	127.02	0.29	8836.95	78.3	132.2	52.59 S 58.07 E
8934.00	0.65	119.89	0.41	8931.64	79.7	132.0	53.37 S 59.21 E
9028.70	0.44	115.36	0.23	9026.34	80.6	131.9	53.79 S 60.00 E
9123.40	0.31	120.95	0.14	9121.04	81.2	131.8	54.08 S 60.55 E
9218.10	0.19	69.07	0.26	9215.74	81.5	131.6	54.15 S 60.91 E

Final Station Closure: Distance: 81.51 ft Az: 131.64 deg.