



UNITED STATES **CCD-ARTESIA**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires July 31, 2010

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
NM-108938

1a Type of Well  Oil Well  Gas Well  Dry  Other  
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  
LCX ENERGY, LLC

8. Lease Name and Well No  
1823 FEDERAL COM #181

3. Address 110 N MARIENFELD, STE 200, MIDLAND, TX 79701  
3a. Phone No (include area code) 432-262-4013

9. AFI Well No.  
30-015-35227

4 Location of Well (Report location clearly and in accordance with Federal requirements)\*  
660' FSL & 1880' FEL SECTION 18, T18S, R23E  
At surface

10. Field and Pool or Exploratory  
WILDCAT - WOLFCAMP

11. Sec, T, R., M., on Block and Survey or Area

NOV 01 2007

CCD-ARTESIA

At top prod. interval reported below  
At total depth 660' FNL & 1880' FEL SECTION 18, T18S, R23E

12. County or Parish  
EDDY  
13. State  
NM

14 Date Spudded 01/14/2006  
15. Date T.D Reached 02/11/2007  
16. Date Completed 06/29/2007  
 D & A  Ready to Prod.

17. Elevations (DF, RKB, RT, GL)\*  
4034' GR

18 Total Depth MD 7976' TVD 4414'  
19 Plug Back T.D. MD 7974' TVD

20 Depth Bridge Plug Set MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
COMPENSATED Z-DENSILOG, CN, GAMMA RAY

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)

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
17 1/2"	13 3/8"	48#	SURFACE	425'		650 POZ/C		SURFACE	
12 1/4"	9 5/8"	36#	SURFACE	1291'		1590 C/RFC		SURFACE	
8 3/4" & 7 7/8"	5 1/2"	17#	SURFACE	8020'		1050 POZ/C		4788' CAL	

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 3/8"	4460'							

25 Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) ABO			4695' - 7980'	.42"	200	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
4695' - 7980'	28,500 GALS 15% HCL, 182,918 GALS SLICK 10# BRINE WATER, 160,389 GALS SLICK FRESH WATER, 23,791 GALS SLICK FRESH WATER (FLUSH), 8,302# SAND, SACKED 20/40, 46,688# LITE PROP 125, 20/40.

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
06/29/07	09/17/07	24	→	0	126	3	0	.6557	PLUNGER LIFT
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→	0	126	3	0	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	
			→						

ACCEPTED FOR RECORD  
OCT 31 2007  
JERRY FANT  
PETROLEUM GEOLOGIST

\*(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 (Solid, used for fuel, vented, etc )

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
SAN ANDRES	SURFACE				
GLORIETA	1750				
TUBB	2760				
ABO SHALE	3400				
ABO PAY ("291" ZONE)	4340				
ABO PAY ("GREEN" ZONE)	4390				

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.

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) VICKIE L. GOTCHER Title Regulatory Analyst  
 Signature Vickie L. Gotcher Date 10/19/2007

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.

A Gyrodata Directional Survey

LCX Energy

Lease: 1823 Fed Com Well: No. 181, 4-1/2" Drillpipe

Location: Big Dog #2, Eddy County, New Mexico

Job Number: MD0107G\_114

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	AZIMUTH deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	N 0 0 E	0.00	0.00	0.0	0.0	0.00 N 0.00 E
-----								
0-4445 FEET RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE. ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO BIG DOG #2 R.K.B.								
-----								
100.00	0.47	52.05	N 52 3 E	0.47	100.00	0.4	52.0	0.25 N 0.33 E
200.00	0.47	56.36	N 56 22 E	0.04	200.00	1.2	53.5	0.74 N 1.00 E
300.00	0.47	56.41	N 56 25 E	0.00	299.99	2.1	54.7	1.20 N 1.69 E
400.00	0.47	56.42	N 56 25 E	0.00	399.99	2.9	55.2	1.65 N 2.38 E
500.00	0.47	50.29	N 50 17 E	0.05	499.99	3.7	54.8	2.15 N 3.04 E
600.00	0.47	50.03	N 50 2 E	0.00	599.98	4.5	53.9	2.67 N 3.67 E
700.00	0.30	325.13	N 34 52 W	0.54	699.98	5.0	50.5	3.16 N 3.83 E
800.00	1.17	319.87	N 40 8 W	0.86	799.97	5.1	36.1	4.15 N 3.03 E
861.28	2.19	0.76	N 0 46 E	2.47	861.23	6.4	24.5	5.80 N 2.64 E
955.22	2.19	0.93	N 0 56 E	0.01	955.10	9.8	16.0	9.38 N 2.69 E
1049.16	2.19	0.94	N 0 56 E	0.00	1048.97	13.3	12.0	12.97 N 2.75 E
1143.10	3.26	355.91	N 4 6 W	1.16	1142.80	17.6	8.5	17.43 N 2.59 E
1237.04	3.11	359.24	N 0 45 W	0.25	1236.60	22.8	6.0	22.63 N 2.37 E
1330.98	3.17	2.65	N 2 39 E	0.21	1330.40	27.9	5.0	27.78 N 2.45 E
1424.92	3.64	1.91	N 1 54 E	0.50	1424.17	33.5	4.6	33.35 N 2.67 E
1518.86	3.64	1.88	N 1 53 E	0.00	1517.92	39.4	4.2	39.31 N 2.87 E
1612.80	3.64	1.25	N 1 15 E	0.04	1611.67	45.4	3.8	45.27 N 3.03 E
1706.74	3.50	359.33	N 0 40 W	0.20	1705.43	51.2	3.4	51.12 N 3.06 E
1800.68	3.49	358.75	N 1 15 W	0.04	1799.19	56.9	3.0	56.85 N 2.97 E
1894.62	3.05	355.15	N 4 51 W	0.51	1892.98	62.3	2.5	62.20 N 2.69 E

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1988.56	2.72	350.99	N 9 1 W	0.42	1986.80	66.9	1.8	66.89 N 2.13 E
2082.50	2.36	350.68	N 9 19 W	0.38	2080.65	71.0	1.2	71.00 N 1.47 E
2176.44	2.02	343.89	N 16 7 W	0.45	2174.52	74.5	0.5	74.50 N 0.70 E
2270.38	1.92	343.19	N 16 49 W	0.11	2268.41	77.6	359.8	77.59 N 0.22 W
2364.32	1.78	339.87	N 20 8 W	0.18	2362.30	80.5	359.2	80.47 N 1.17 W
2458.26	1.73	337.02	N 22 59 W	0.11	2456.19	83.2	358.5	83.15 N 2.23 W
2552.20	1.63	334.96	N 25 2 W	0.13	2550.09	85.7	357.8	85.67 N 3.35 W
2646.14	1.63	334.96	N 25 2 W	0.00	2643.99	88.2	357.1	88.08 N 4.48 W
2740.08	1.57	332.48	N 27 31 W	0.10	2737.90	90.6	356.4	90.43 N 5.64 W
2834.02	1.60	329.99	N 30 0 W	0.08	2831.80	93.0	355.8	92.71 N 6.89 W
2927.96	1.66	324.66	N 35 21 W	0.17	2925.70	95.3	355.0	94.96 N 8.33 W
3021.90	1.66	321.15	N 38 51 W	0.11	3019.60	97.6	354.1	97.13 N 9.98 W
3115.84	1.60	319.24	N 40 46 W	0.09	3113.51	99.9	353.3	99.19 N 11.69 W
3209.78	1.47	319.62	N 40 23 W	0.14	3207.41	102.0	352.5	101.10 N 13.33 W
3303.72	1.38	317.85	N 42 9 W	0.11	3301.32	103.9	351.8	102.86 N 14.87 W
3397.66	1.19	318.26	N 41 45 W	0.20	3395.24	105.7	351.1	104.42 N 16.27 W
3491.60	1.19	314.35	N 45 39 W	0.09	3489.16	107.3	350.5	105.83 N 17.62 W
3585.54	1.19	317.26	N 42 44 W	0.06	3583.08	108.9	350.0	107.23 N 18.98 W
3679.48	1.06	323.85	N 36 9 W	0.20	3677.00	110.5	349.5	108.65 N 20.16 W
3773.42	1.03	327.86	N 32 9 W	0.09	3770.92	112.1	349.1	110.06 N 21.12 W
3867.36	0.93	335.92	N 24 5 W	0.18	3864.85	113.6	348.9	111.47 N 21.88 W
3961.30	0.92	346.37	N 13 38 W	0.18	3958.78	115.1	348.8	112.90 N 22.36 W
4055.24	1.02	3.24	N 3 14 E	0.32	4052.71	116.7	348.9	114.47 N 22.50 W
4149.18	1.07	17.19	N 17 11 E	0.28	4146.63	118.2	349.2	116.14 N 22.19 W

A Gyrodata Directional Survey

LCX Energy

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Location: Big Dog #2, Eddy County, New Mexico

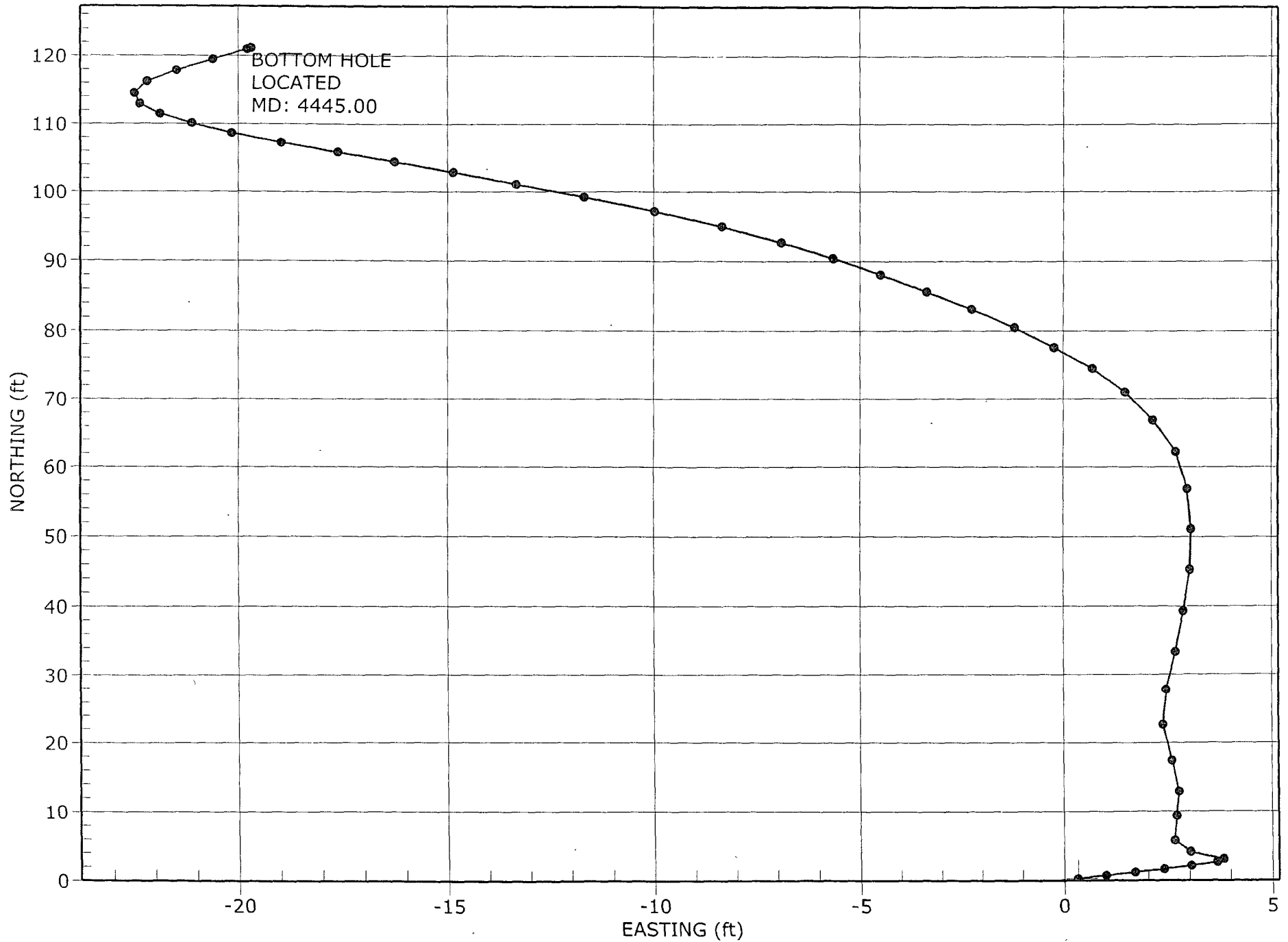
Job Number: MD0107G\_114

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4243.12	1.16	27.87	N 27 52 E	0.24	4240.55	119.8 349.7	117.83 N 21.48 W
4337.06	1.08	29.21	N 29 12 E	0.09	4334.47	121.2 350.2	119.44 N 20.60 W
4431.00	1.03	26.98	N 26 59 E	0.07	4428.40	122.6 350.7	120.97 N 19.79 W
4445.00	0.81	23.37	N 23 22 E	1.61	4442.40	122.8 350.8	121.17 N 19.69 W

Final Station Closure: Distance: 122.76 ft Az: 350.77 deg.

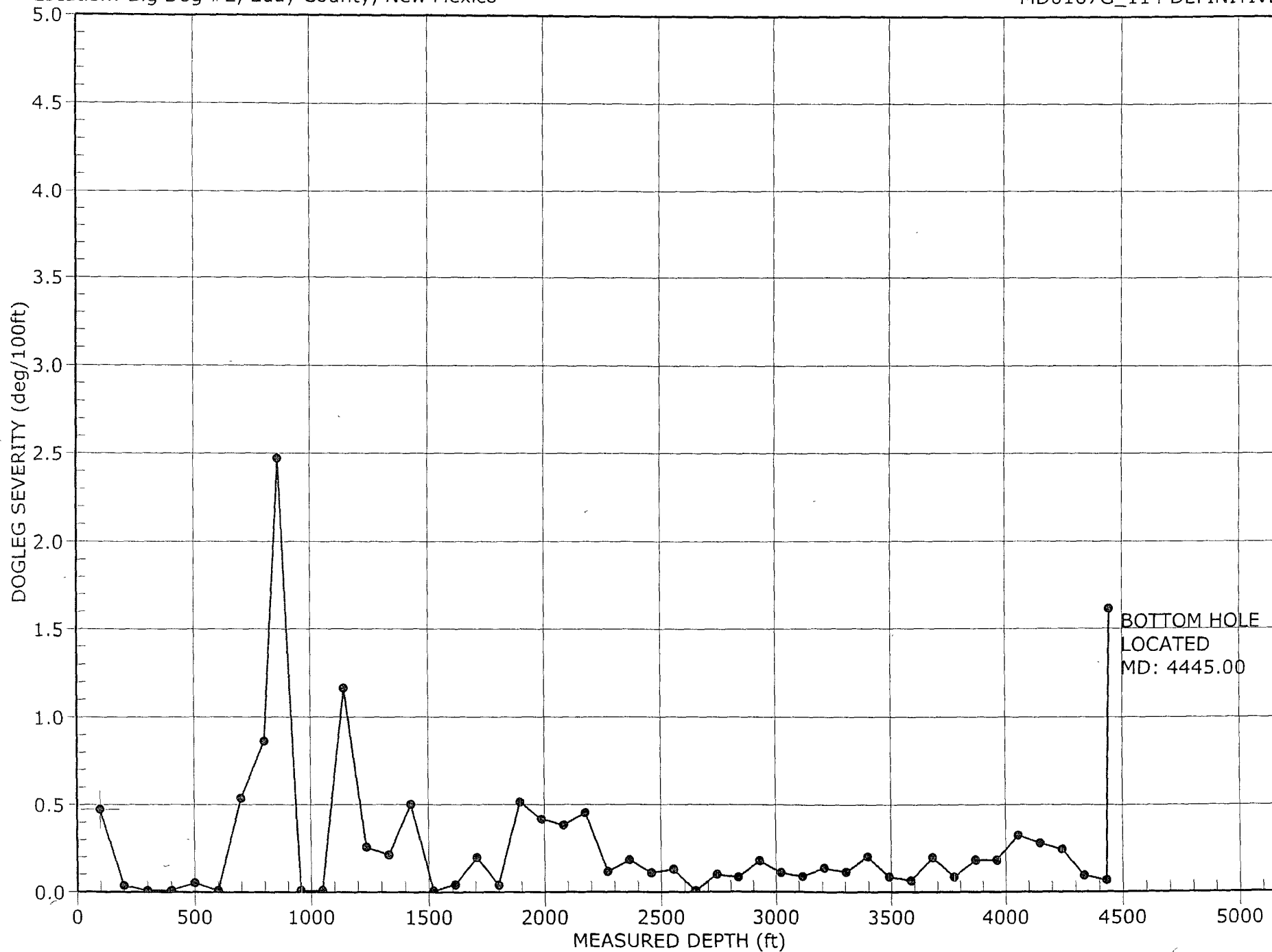
LCX Energy  
Well: 1823 Fed Com No. 181 4-1/2" Drillpipe  
Location: Big Dog #2, Eddy County, New Mexico

Outrun  
Gyrodata  
MD0107G\_114 DEFINITIVE



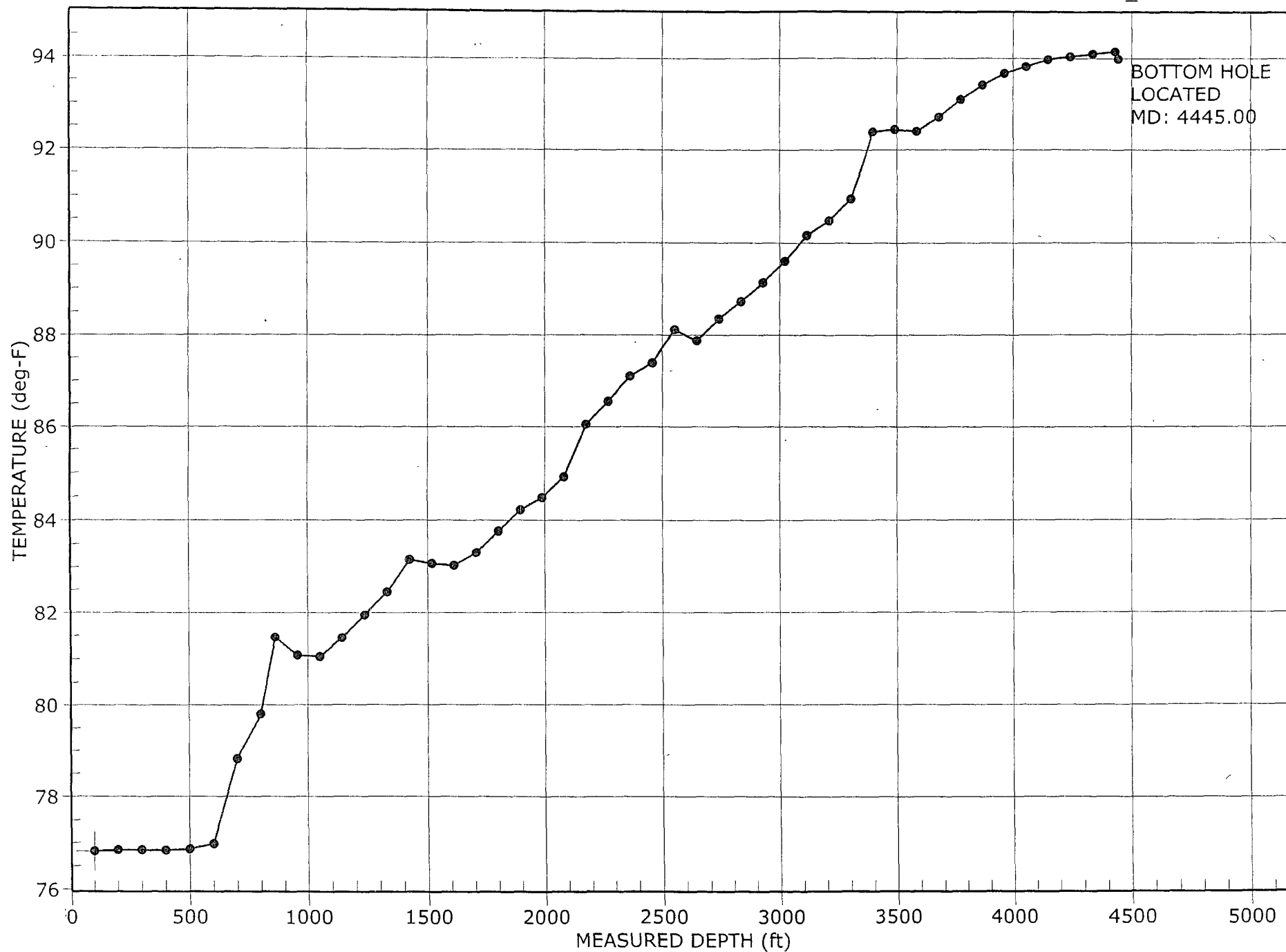
LCX Energy  
Well: 1823 Fed Com No. 181 4-1/2" Drillpipe  
Location: Big Dog #2, Eddy County, New Mexico

Outrun  
Gyrodata  
MD0107G\_114 DEFINITIVE



LCX Energy  
Well: 1823 Fed Com No. 181 4-1/2" Drillpipe  
Location: Big Dog #2, Eddy County, New Mexico

Outrun  
Gyrodatta  
MD0107G\_114 DEFINITIVE





A Gyrodata Directional Survey

for

LCX ENERGY

Lease: 1823 Fed Com Well: No. 181, 4-1/2" Drillpipe  
Location: Big Dog #2, Eddy County, New Mexico

Job Number: MD0107G\_114

Run Date: 30 Jan 2007

Surveyor: Thomas Bowden; Cody Dutton

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 31.222200 deg. N Longitude: 104.232300 deg. W

Azimuth Correction:

Gyro: 0.21000 deg East to Grid North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Frances Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

Hobbs, NM 88240  
Avenue, Artesia, NM 86210  
Brazos Rd., Aztec, NM 87410

PLAT IV  
S. St. Francis Dr., Santa Fe, NM 87505

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number	Pool Code	Pool Name <b>WILDCAT-WOLFCAMP</b>
Property Code	Property Name <b>1823 FED COM</b>	
OGRID No. <b>218885</b>	Operator Name <b>LCX ENERGY, LLC</b>	
		Well Number <b>181</b>
		Elevation <b>4034'</b>

**Surface Location**

Lot or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	18	18 S	23 E		1880	EAST	660	SOUTH	EDDY

**Bottom Hole Location If Different From Surface**

Lot or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	18	18 S	23 E		1880	EAST	660	NORTH	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

**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**

Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1983. Distances shown hereon are mean horizontal surface values.

**OPERATOR CERTIFICATION**

I hereby certify 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 undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this 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.

*Joe T. Janica*  
Signature

Date  
**08/08/06**

Printed Name  
**Joe T. Janica**

Agent

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**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.

June 22, 2006

Date of Survey

Signature & Seal of Professional Surveyor

JSR

*[Signature]*

W.O. Num. 2006-0730

Certificate No. MACON McDONALD 12185

# Survey Report

<p>Report Date: February 12, 2007                  Client: LCX Energy                  Field: Eddy County, NM Nad 83                  Structure / Slot: 1823 FED COM #181 / 1823 FED COM #181                  Well: 1823 FED COM #181                  Borehole: 1823 FED COM #181                  UWI/API#: _____                  Survey Name / Date: 1823 Fed Com #181_surveys / February 3, 2007                  Tort / AHD / DDI / ERD ratio: 143.640° / 4014.37 ft / 6.020 / 0.908                  Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet                  Location Lat/Long: N 32 44 32.315, W 104 43 41.016                  Location Grid N/E Y/X: N 634010.100 ftUS, E 419972.600 ftUS                  Grid Convergence Angle: -0.21349492°                  Grid Scale Factor: 0.99992596</p>	<p>Survey / DLS Computation Method: Minimum Curvature / Lubinski                  Vertical Section Azimuth: 0.233°                  Vertical Section Origin: N 0.000 ft, E 0.000 ft                  TVD Reference Datum: RKB                  TVD Reference Elevation: 0.0 ft relative to                  Sea Bed / Ground Level Elevation: 0.000 ft relative to                  Magnetic Declination: 8.656°                  Total Field Strength: 49274.226 nT                  Magnetic Dip: 60.571°                  Declination Date: February 03, 2007                  Magnetic Declination Model: IGRF 2005                  North Reference: Grid North                  Total Corr Mag North -&gt; Grid North: +8.869°                  Local Coordinates Referenced To: Well Head</p>
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Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)	Build Rate (deg/100 ft)
Tie-In	3773.40	1.03	327.86	3770.90	109.98	110.06	-21.12	112.07	349.14	0.09	0.90M	-0.04
	3804.00	2.10	0.90	3801.49	110.77	110.86	-21.25	112.88	349.15	4.44	1.80M	3.51
	3833.00	3.80	1.80	3830.45	112.26	112.35	-21.22	114.33	349.31	5.86	2.20M	5.86
	3865.00	6.90	2.20	3862.31	115.24	115.33	-21.11	117.25	349.63	9.69	4.52L	9.69
	3896.00	10.30	0.70	3892.96	119.88	119.96	-21.00	121.79	350.07	10.99	7.24L	10.97
	3927.00	13.90	358.80	3923.26	126.37	126.46	-21.05	128.20	350.55	11.68	4.49L	11.61
	3959.00	17.80	357.80	3954.04	135.11	135.19	-21.32	136.86	351.04	12.22	4.06L	12.19
	3990.00	21.40	357.10	3983.24	145.49	145.58	-21.78	147.20	351.49	11.64	1.53R	11.61
	4022.00	24.50	357.30	4012.70	157.95	158.04	-22.39	159.62	351.94	9.69	7.03R	9.69
	4053.00	27.50	358.10	4040.56	171.52	171.62	-22.93	173.14	352.39	9.74	1.94L	9.68
	4084.00	30.50	357.90	4067.67	186.54	186.64	-23.46	188.10	352.84	9.68	1.99R	9.68
	4116.00	33.70	358.10	4094.78	203.53	203.63	-24.05	205.04	353.26	10.01	2.09R	10.00
	4147.00	37.00	358.30	4120.06	221.45	221.55	-24.61	222.92	353.66	10.65	11.52R	10.65
	4178.00	39.50	359.10	4144.40	240.63	240.74	-25.04	242.04	354.06	8.22	12.10R	8.06
	4209.00	42.00	359.90	4167.89	260.87	260.97	-25.22	262.19	354.48	8.24	7.99R	8.06
	4241.00	44.50	0.40	4191.19	282.79	282.89	-25.16	284.01	354.92	7.89	6.94R	7.81
	4272.00	46.90	0.80	4212.84	304.97	305.08	-24.92	306.09	355.33	7.80	HS	7.74
	4303.00	49.50	0.80	4233.50	328.08	328.18	-24.60	329.10	355.71	8.39	4.54L	8.39
	4334.00	52.50	0.50	4253.01	352.17	352.27	-24.33	353.11	356.05	9.71	1.53L	9.68
	4366.00	55.60	0.40	4271.79	378.07	378.17	-24.13	378.94	356.35	9.69	1.87L	9.69
	4397.00	58.20	0.30	4288.72	404.04	404.14	-23.97	404.85	356.61	8.39	1.92R	8.39
	4429.00	60.80	0.40	4304.96	431.61	431.71	-23.80	432.36	356.84	8.13	2.13R	8.12
	4460.00	63.20	0.50	4319.51	458.98	459.08	-23.58	459.68	357.06	7.75	6.77R	7.74
	4492.00	65.50	0.80	4333.36	487.82	487.92	-23.26	488.47	357.27	7.24	2.31R	7.19
	4523.00	67.80	0.90	4345.65	516.28	516.37	-22.83	516.88	357.47	7.43	HS	7.42
	4554.00	70.10	0.90	4356.78	545.20	545.30	-22.38	545.76	357.65	7.42	HS	7.42
	4585.00	71.00	0.90	4367.11	574.43	574.53	-21.92	574.95	357.82	2.90	7.79L	2.90
	4617.00	73.10	0.60	4376.97	604.87	604.97	-21.52	605.35	357.96	6.62	4.91R	6.56
	4648.00	76.50	0.90	4385.09	634.78	634.87	-21.13	635.23	358.09	11.01	1.82R	10.97
	4679.00	79.60	1.00	4391.51	665.10	665.19	-20.63	665.51	358.22	10.00	3.53L	10.00
	4710.00	81.20	0.90	4396.68	695.67	695.76	-20.12	696.05	358.34	5.17	HS	5.16
	4742.00	83.50	0.90	4400.94	727.38	727.46	-19.62	727.73	358.45	7.19	1.43R	7.19
	4780.00	87.50	1.00	4403.92	765.25	765.33	-18.99	765.57	358.58	10.53	9.46L	10.53
	4811.00	88.10	0.90	4405.11	796.23	796.31	-18.48	796.52	358.67	1.96	90.00L	1.94
	4842.00	88.10	0.70	4406.14	827.21	827.29	-18.05	827.48	358.75	0.64	33.68L	0.00
	4873.00	88.40	0.50	4407.09	858.19	858.27	-17.72	858.45	358.82	1.16	26.56L	0.97
	4904.00	88.60	0.40	4407.90	889.18	889.26	-17.48	889.43	358.87	0.72	29.06R	0.65
	4934.00	89.50	0.90	4408.40	919.18	919.25	-17.14	919.41	358.93	3.43	HS	3.00

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)	Build Rate (deg/100 ft)
	4965.00	89.90	0.90	4408.56	950.17	950.25	-16.65	950.39	359.00	1.29	HS	1.29
	4997.00	90.50	0.90	4408.45	982.17	982.24	-16.15	982.38	359.06	1.87	14.03L	1.87
	5028.00	90.90	0.80	4408.07	1013.17	1013.24	-15.69	1013.36	359.11	1.33	160.56L	1.29
	5060.00	89.20	0.20	4408.04	1045.16	1045.24	-15.41	1045.35	359.16	5.63	172.41L	-5.31
	5091.00	87.70	0.00	4408.88	1076.15	1076.22	-15.36	1076.33	359.18	4.88	90.00L	-4.84
	5121.00	87.70	359.90	4410.08	1106.13	1106.20	-15.38	1106.31	359.20	0.33	33.67L	0.00
	5152.00	88.00	359.70	4411.24	1137.10	1137.18	-15.49	1137.28	359.22	1.16	HS	0.97
	5182.00	88.40	359.70	4412.19	1167.09	1167.16	-15.65	1167.27	359.23	1.33	HS	1.33
	5213.00	89.00	359.70	4412.89	1198.08	1198.15	-15.81	1198.26	359.24	1.94	11.31L	1.94
	5244.00	89.50	359.60	4413.30	1229.07	1229.15	-16.00	1229.25	359.25	1.64	11.31L	1.61
	5275.00	90.00	359.50	4413.43	1260.07	1260.15	-16.24	1260.25	359.26	1.64	HS	1.61
	5307.00	90.50	359.50	4413.29	1292.07	1292.15	-16.52	1292.25	359.27	1.56	26.56L	1.56
	5338.00	90.90	359.30	4412.91	1323.06	1323.14	-16.85	1323.25	359.27	1.44	171.87R	1.29
	5369.00	90.20	359.40	4412.62	1354.06	1354.14	-17.20	1354.25	359.27	2.28	LS	-2.26
	5401.00	90.10	359.40	4412.53	1386.05	1386.14	-17.53	1386.25	359.28	0.31	33.69L	-0.31
	5432.00	90.40	359.20	4412.40	1417.05	1417.13	-17.91	1417.25	359.28	1.16	33.69R	0.97
	5464.00	91.00	359.60	4412.01	1449.04	1449.13	-18.25	1449.25	359.28	2.25	90.00R	1.87
	5495.00	91.00	0.40	4411.46	1480.04	1480.13	-18.25	1480.24	359.29	2.58	26.56L	0.00
	5526.00	91.20	0.30	4410.87	1511.03	1511.12	-18.06	1511.23	359.32	0.72	164.05R	0.65
	5558.00	90.50	0.50	4410.39	1543.03	1543.11	-17.83	1543.22	359.34	2.28	LS	-2.19
	5589.00	89.20	0.50	4410.48	1574.03	1574.11	-17.56	1574.21	359.36	4.19	18.43R	-4.19
	5620.00	89.50	0.60	4410.83	1605.03	1605.11	-17.27	1605.20	359.38	1.02	120.97L	0.97
	5651.00	89.20	0.10	4411.18	1636.02	1636.11	-17.08	1636.20	359.40	1.88	63.43L	-0.97
	5683.00	89.30	359.90	4411.60	1668.02	1668.10	-17.08	1668.19	359.41	0.70	HS	0.31
	5714.00	89.50	359.90	4411.92	1699.02	1699.10	-17.13	1699.19	359.42	0.65	45.00L	0.65
	5745.00	89.90	359.50	4412.08	1730.02	1730.10	-17.29	1730.19	359.43	1.82	HS	1.29
	5776.00	90.30	359.50	4412.03	1761.01	1761.10	-17.56	1761.19	359.43	1.29	78.69L	1.29
	5808.00	90.40	359.00	4411.84	1793.01	1793.10	-17.98	1793.19	359.43	1.59	26.57L	0.31
	5839.00	90.60	358.90	4411.56	1824.00	1824.09	-18.55	1824.18	359.42	0.72	33.69R	0.65
	5870.00	90.90	359.10	4411.16	1854.99	1855.08	-19.09	1855.18	359.41	1.16	145.01R	0.97
	5902.00	89.90	359.80	4410.94	1886.98	1887.08	-19.40	1887.18	359.41	3.81	99.46R	-3.13
	5933.00	89.80	0.40	4411.02	1917.98	1918.08	-19.35	1918.18	359.42	1.96	45.00R	-0.32
	5964.00	90.20	0.80	4411.02	1948.98	1949.08	-19.02	1949.17	359.44	1.82	63.43R	1.29
	5996.00	90.30	1.00	4410.88	1980.98	1981.07	-18.52	1981.16	359.46	0.70	LS	0.31
	6027.00	88.60	1.00	4411.17	2011.98	2012.07	-17.98	2012.15	359.49	5.48	90.00R	-5.48
	6058.00	88.60	1.50	4411.93	2042.96	2043.05	-17.30	2043.12	359.51	1.61	56.31R	0.00
	6089.00	88.80	1.80	4412.64	2073.94	2074.03	-16.41	2074.09	359.55	1.16	90.00R	0.65
	6121.00	88.80	2.00	4413.31	2105.92	2106.00	-15.35	2106.06	359.58	0.62	63.43R	0.00
	6152.00	88.90	2.20	4413.93	2136.90	2136.98	-14.21	2137.02	359.62	0.72	90.00L	0.32
	6183.00	88.90	2.10	4414.52	2167.88	2167.95	-13.05	2167.99	359.66	0.32	90.00L	0.00
	6215.00	88.90	2.00	4415.14	2199.86	2199.92	-11.90	2199.95	359.69	0.31	135.01R	0.00
	6246.00	88.80	2.10	4415.76	2230.83	2230.90	-10.80	2230.92	359.72	0.46	90.00L	-0.32
	6277.00	88.80	2.00	4416.41	2261.81	2261.87	-9.69	2261.89	359.75	0.32	75.97L	0.00
	6308.00	88.90	1.60	4417.03	2292.79	2292.85	-8.71	2292.86	359.78	1.33	HS	0.32
	6340.00	89.00	1.60	4417.62	2324.78	2324.83	-7.82	2324.84	359.81	0.31	116.57R	0.31
	6372.00	88.90	1.80	4418.20	2356.76	2356.81	-6.87	2356.82	359.83	0.70	63.43L	-0.31
	6404.00	89.00	1.60	4418.79	2388.75	2388.79	-5.92	2388.80	359.86	0.70	146.32L	0.31
	6436.00	88.70	1.40	4419.43	2420.73	2420.77	-5.08	2420.78	359.88	1.13	78.69L	-0.94
	6468.00	88.80	0.90	4420.13	2452.72	2452.76	-4.44	2452.76	359.90	1.59	HS	0.31
	6500.00	89.30	0.90	4420.66	2484.71	2484.75	-3.94	2484.75	359.91	1.56	26.56L	1.56
	6532.00	89.50	0.80	4421.00	2516.71	2516.75	-3.47	2516.75	359.92	0.70	63.44L	0.62
	6563.00	89.70	0.40	4421.21	2547.71	2547.74	-3.14	2547.75	359.93	1.44	90.00R	0.65
	6595.00	89.70	0.70	4421.38	2579.71	2579.74	-2.83	2579.74	359.94	0.94	53.13L	0.00
	6627.00	90.00	0.30	4421.46	2611.71	2611.74	-2.55	2611.74	359.94	1.56	26.57L	0.94

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)	Build Rate (deg/100 ft)
	6659.00	90.20	0.20	4421.41	2643.71	2643.74	-2.41	2643.74	359.95	0.70	HS	0.62
	6691.00	90.30	0.20	4421.27	2675.71	2675.74	-2.30	2675.74	359.95	0.31	135.00L	0.31
	6722.00	90.20	0.10	4421.13	2706.71	2706.74	-2.22	2706.74	359.95	0.46	26.56L	-0.32
	6753.00	90.40	0.00	4420.97	2737.71	2737.74	-2.19	2737.74	359.95	0.72	116.56R	0.65
	6784.00	90.30	0.20	4420.78	2768.71	2768.74	-2.14	2768.74	359.96	0.72	---	-0.32
	6816.00	90.30	0.20	4420.61	2800.71	2800.74	-2.03	2800.74	359.96	0.00	HS	0.00
	6848.00	90.40	0.20	4420.42	2832.71	2832.74	-1.92	2832.74	359.96	0.31	135.00R	0.31
	6880.00	90.30	0.30	4420.22	2864.70	2864.74	-1.78	2864.74	359.96	0.44	116.56L	-0.31
	6912.00	90.20	0.10	4420.08	2896.70	2896.73	-1.67	2896.74	359.97	0.70	LS	-0.31
	6944.00	90.10	0.10	4420.00	2928.70	2928.73	-1.61	2928.74	359.97	0.31	75.96L	-0.31
	6975.00	90.20	359.70	4419.92	2959.70	2959.73	-1.66	2959.73	359.97	1.33	---	0.32
	7007.00	90.20	359.70	4419.81	2991.70	2991.73	-1.83	2991.73	359.96	0.00	HS	0.00
	7039.00	90.40	359.70	4419.64	3023.70	3023.73	-2.00	3023.73	359.96	0.62	HS	0.63
	7071.00	90.70	359.70	4419.33	3055.70	3055.73	-2.17	3055.73	359.96	0.94	116.57R	0.94
	7103.00	90.60	359.90	4418.97	3087.69	3087.73	-2.28	3087.73	359.96	0.70	HS	-0.31
	7135.00	90.80	359.90	4418.58	3119.69	3119.73	-2.33	3119.73	359.96	0.62	45.00R	0.62
	7166.00	90.90	0.00	4418.12	3150.69	3150.72	-2.36	3150.72	359.96	0.46	159.44L	0.32
	7198.00	90.10	359.70	4417.84	3182.68	3182.72	-2.45	3182.72	359.96	2.67	90.00R	-2.50
	7229.00	90.10	359.80	4417.78	3213.68	3213.72	-2.58	3213.72	359.95	0.32	53.13R	0.00
	7259.00	90.40	0.20	4417.65	3243.68	3243.72	-2.58	3243.72	359.95	1.67	26.56R	1.00
	7291.00	90.60	0.30	4417.37	3275.68	3275.72	-2.44	3275.72	359.96	0.70	18.43R	0.63
	7322.00	90.90	0.40	4416.97	3306.68	3306.72	-2.25	3306.72	359.96	1.02	LS	0.97
	7354.00	89.70	0.40	4416.80	3338.68	3338.71	-2.03	3338.71	359.97	3.75	90.00L	-3.75
	7386.00	89.70	0.20	4416.97	3370.68	3370.71	-1.86	3370.71	359.97	0.62	71.57L	0.00
	7418.00	89.80	359.90	4417.11	3402.68	3402.71	-1.83	3402.71	359.97	0.99	90.00R	0.31
	7449.00	89.80	0.20	4417.22	3433.68	3433.71	-1.81	3433.71	359.97	0.97	26.57L	0.00
	7481.00	90.20	0.00	4417.22	3465.68	3465.71	-1.75	3465.71	359.97	1.40	HS	1.25
	7514.00	90.40	0.00	4417.04	3498.68	3498.71	-1.75	3498.71	359.97	0.61	18.43R	0.61
	7546.00	90.70	0.10	4416.74	3530.67	3530.71	-1.72	3530.71	359.97	0.99	104.03L	0.94
	7578.00	90.60	359.70	4416.37	3562.67	3562.71	-1.78	3562.71	359.97	1.29	105.25L	-0.31
	7642.00	90.30	358.60	4415.87	3626.66	3626.70	-2.73	3626.70	359.96	1.78	75.96R	-0.47
	7707.00	90.60	359.80	4415.36	3691.64	3691.69	-3.63	3691.69	359.94	1.90	104.03L	0.46
	7769.00	90.40	359.00	4414.82	3753.63	3753.68	-4.28	3753.68	359.93	1.33	90.00R	-0.32
	7833.00	90.40	2.30	4414.37	3817.62	3817.67	-3.56	3817.67	359.95	5.16	131.18R	0.00
	7864.00	89.70	3.10	4414.35	3848.59	3848.63	-2.10	3848.63	359.97	3.43	23.20R	-2.26
	7896.00	90.40	3.40	4414.32	3880.55	3880.58	-0.28	3880.58	360.00	2.38	90.00R	2.19
	7928.00	90.40	4.50	4414.09	3912.48	3912.50	1.92	3912.50	0.03	3.44	161.56L	0.00
	7959.00	90.10	4.40	4413.96	3943.39	3943.41	4.33	3943.41	0.06	1.02	165.96L	-0.97
	7976.00	89.70	4.30	4413.99	3960.35	3960.36	5.62	3960.36	0.08	2.43	HS	-2.35
Projected TD	8020.00	89.80	4.30	4414.18	4004.24	4004.24	8.91	4004.25	0.13	0.23	---	0.23