

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 20075 Lease Serial No.
NM-108961

1a Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr,
Other _____

2. Name of Operator
LCX Energy, LLC.

3 Address
110 North Marienfeld, Suite 200 Midland TX 79701

3 a Phone No (Include area code)
(432)262-4014

4 Location of Well (Report location clearly and in accordance with Federal requirements)*

At Surface 460' FSL & 760' FWL Section 29 T17S-R24E Eddy Co. NM

At top prod. interval reported below

At total depth EQH 660' FNL & 760' FWL Sec. 29 T17S-R24E

FEB 19 2008
OCD-ARTESIA

6 If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and no

8. Lease Name and Well No
1724 Federal Com 292

9. API Well No
30-015-35497

10 Field and Pool, or Exploratory
Collins Ranch-Wolfcamp

11. Sec., T., R., M., on Block and
Survey or Area M Sec: 29 Twn: 17

12. County or Parish
Eddy

13. State
NM

14. Date Spudded
04/21/2007

15 Date T.D. Reached
05/10/2007

16 Date Completed
☐ D & A ☒ Ready to Prod
07/17/2007

17. Elevations (DF, RKB, RT, GL)*
3848 GRL

18. Total Depth MD 8710
TVD 4235

19. Plug Back T.D.. MD 8656
TVD

20. Depth Bridge Plug Set: MD
TVD

21 Type of Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2 & 9 5/8		36	Surface	1288		410 C, 150		Surface	
12 1/4						POZ C			
7 7/8	5 1/2	17	Surface	8710		257 RFC		Surface	
						480 POZ C			
						355 PLV			

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	4705							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Wolfcamp	5025	8650				
B)						
C)						
D)						

27 Acid, Fracture, Treatment, Cement Squeeze, Etc
Depth Interval

Amount and Type of Material

5025-8650
Frac w/707.1 bbls HCL acid, 21466 gals slick water, 190411 gals 10# Brine, 8K# 20/40 White Sand,
48K# 20/40 LiteProp 125

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
7/19/07	7/20/07	24	→	0	1112	0		.9973	Flowing
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
22/64	1250		→	0	1112	0		Producing	

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 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)

Sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones or 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
Dolomite	3350	3710			
Dolomite, Shale	3710	3730			
Shale	3730	3890			
Dolomite, Shale	3890	4220			
Dolomite	4220	5030			
Dolomite, Lime	5030	5110			
Dolomite	5110	8708			

32. Additional remarks (include plugging procedure):

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

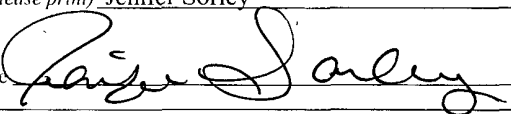
- ☒ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geological Report
 ☐ DST Report
 ☒ Directional Survey
☐ Sundry Notice for plugging and cement verification
☐ Core Analysis
☐ Other

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) Jenifer Sorley

Title Regulatory Analyst

Signature



Date 02/08/2008

Title 18 U.S.C. Section 101 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 and false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

AGAVE ENERGY
105 SOUTH 4TH ARTESIA N.M. 88210
(505) 748-1471

Source: METER RUN Report Date: 01/14/2008 15:27:22
Station #: 12239 Sample Date: 01/14/08
Station Name: LCX 1724 FED COM. 292 Flowing Pressure: 251 psig
Field: ATOKA 3 Flowing Temp.: 61 F

Method: c:\mti\ezchrom\200\methods\adec07.
File: c:\mti\ezchrom\200\chrom\12239.1

Gas Analysis by Chromatograph

Name	Mole %	BTU	RD	GPM
Nitrogen	0.933	0.000	0.009	
Methane	88.986	900.838	0.493	
CO2	0.116	0.000	0.002	
Ethane	5.989	106.227	0.062	1.602
H2S	0.000	0.000	0.000	
Propane	2.353	59.341	0.036	0.648
i-Butane	0.356	11.604	0.007	0.116
n-Butane	0.599	19.586	0.012	0.189
i-Pentane	0.198	7.940	0.005	0.072
n-Pentane	0.182	7.313	0.005	0.066
Hexanes	0.145	6.912	0.004	0.060
Heptanes	0.061	3.364	0.002	0.028
Octanes	0.053	3.717	0.002	0.030
Nonanes	0.029	1.816	0.001	0.015

Ideal Total	100.000	1128.658	0.640	2.826
Unnormalized Total	101.545			

Gross BTU/Real Cu. Ft. (@ 60 deg F, 14.730)	Gasoline Content
Dry = 1131.734	Propane GPM = 0.648
Sat. = 1113.306	Butane GPM = 0.305
Actual = 1131.734	Gasoline GPM = 0.256
(0.000 lbs. water/MMCF)	26# Gasoline GPM = 0.445
	Total GPM = 2.826

Real Relative Density Calculated = 0.6417
On-Site Relative Density = 0.6440

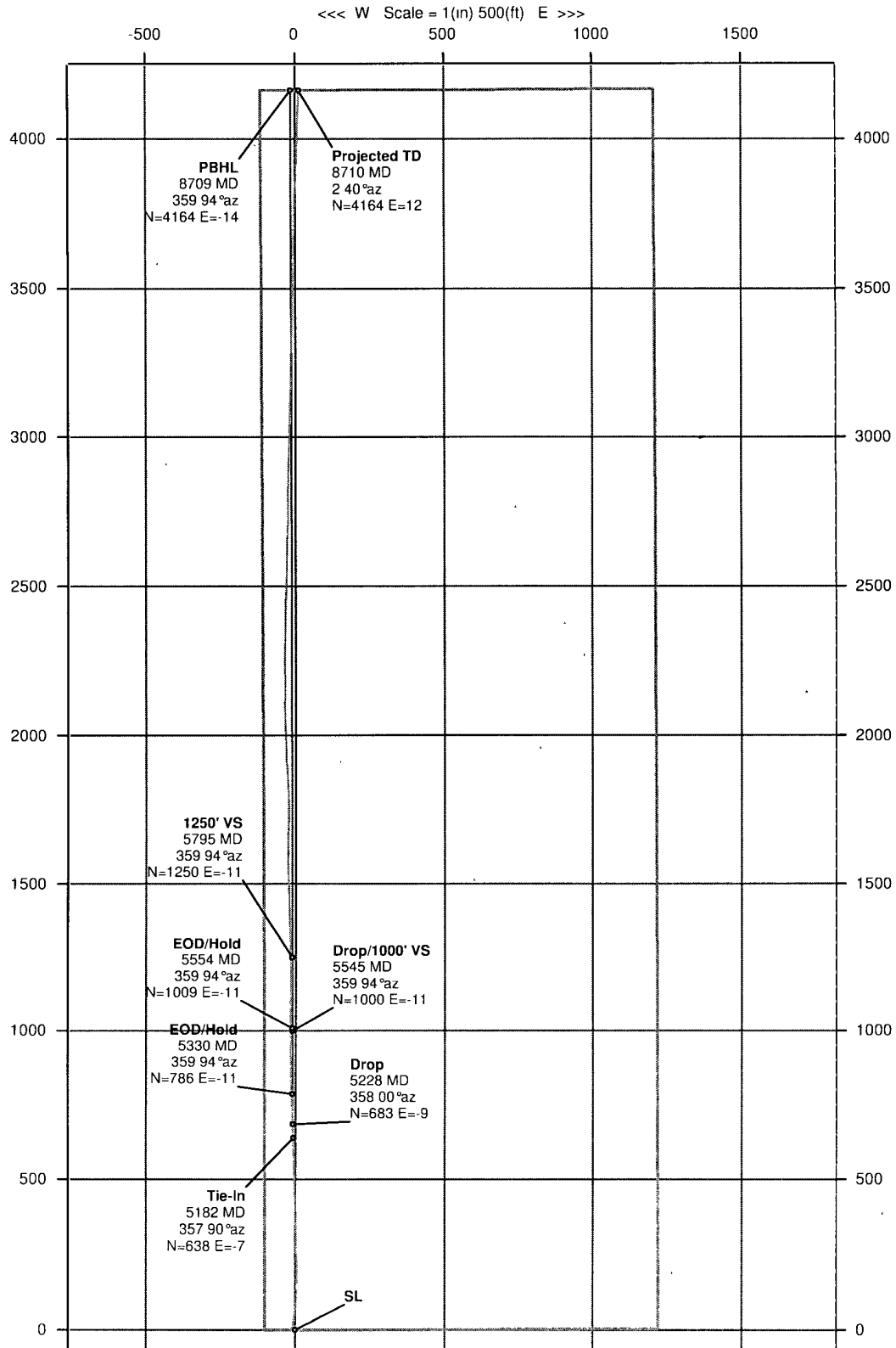
Gas Compressibility = 0.9973

Remarks:

JAN 25 ENT

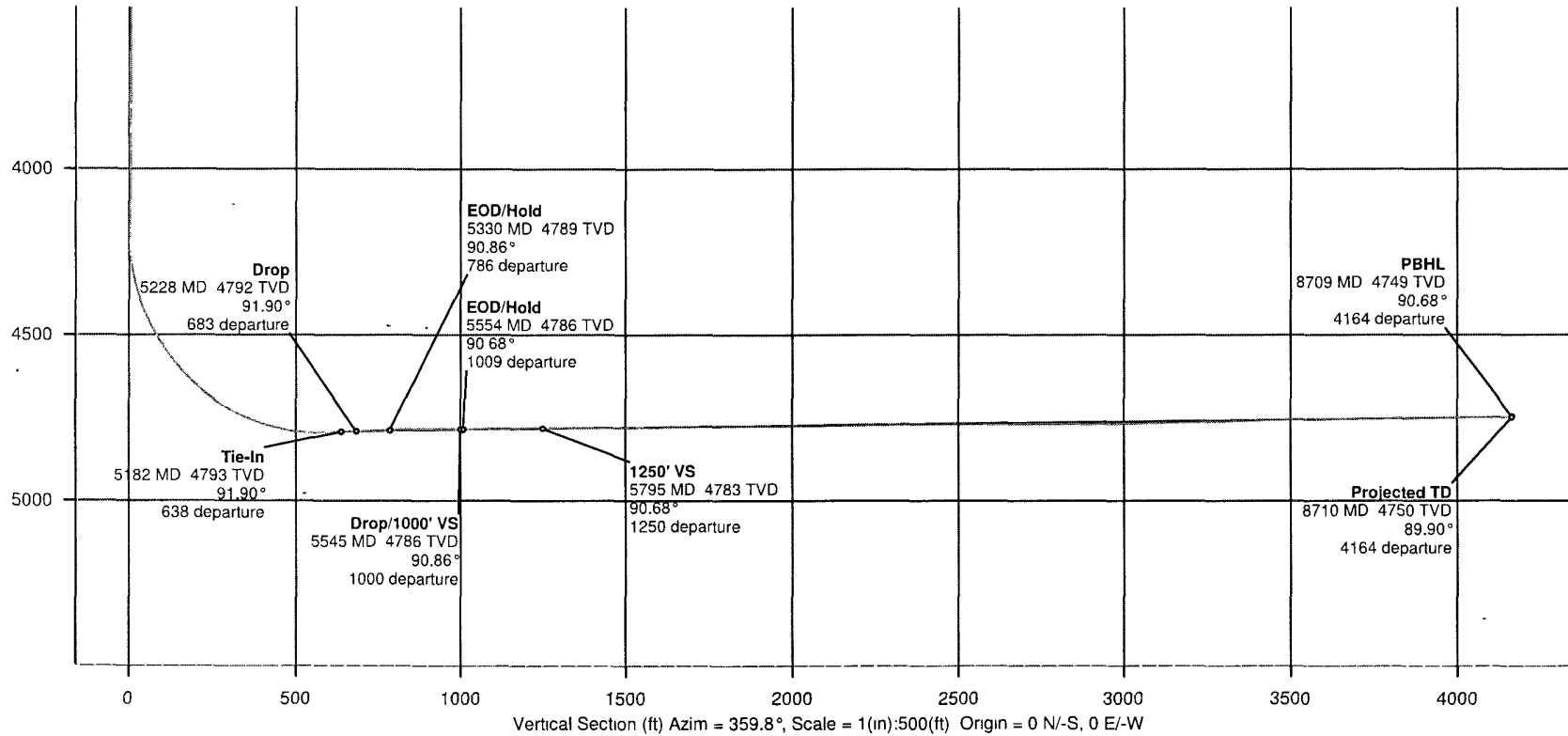
LCX Energy

WELL	1724 Federal Com #292	FIELD	Eddy County, NM Nad 83	STRUCTURE	1724 Federal Com #292
Magnetic Parameters Model IG-RF 2005	Dip 60.641° Min. Dip -18.583°	Date May 01, 2007 E.S. 65300.5-11	Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet Lat N32 48 1 200 Lon W104 37 2 100	Northings 655010.89 RLUS Easting 454055.64 RLUS	Miscellaneous 1724 Federal Com #292 (VD Ref. (R&B) 0 00 ft above) 1724 Federal Com #292, Surface Date: May 01, 2007



LCX Energy

WELL	1724 Federal Com #292	FIELD	Eddy County, NM Nad 83	STRUCTURE	1724 Federal Com #292
Magnetic Parameters Model IGRF 2005	Dip 60.641° Mag Dec +8.585°	Date May 01, 2007 FS 49300.5 nT	Surface Location Lat N32 48 1 200 Lon W104 37 2 100	NAD83 New Mexico State Plane Datum Northings 655010.83 NUS Easting 454099.84 NUS	Scale Factor 0.999917806
Miscellaneous Size 1724 Federal Com #292 Plan 1724 Federal Com #292 surveys	TVD Ref Survey Data	RKB (0.00 ft above)	May 01, 2007		

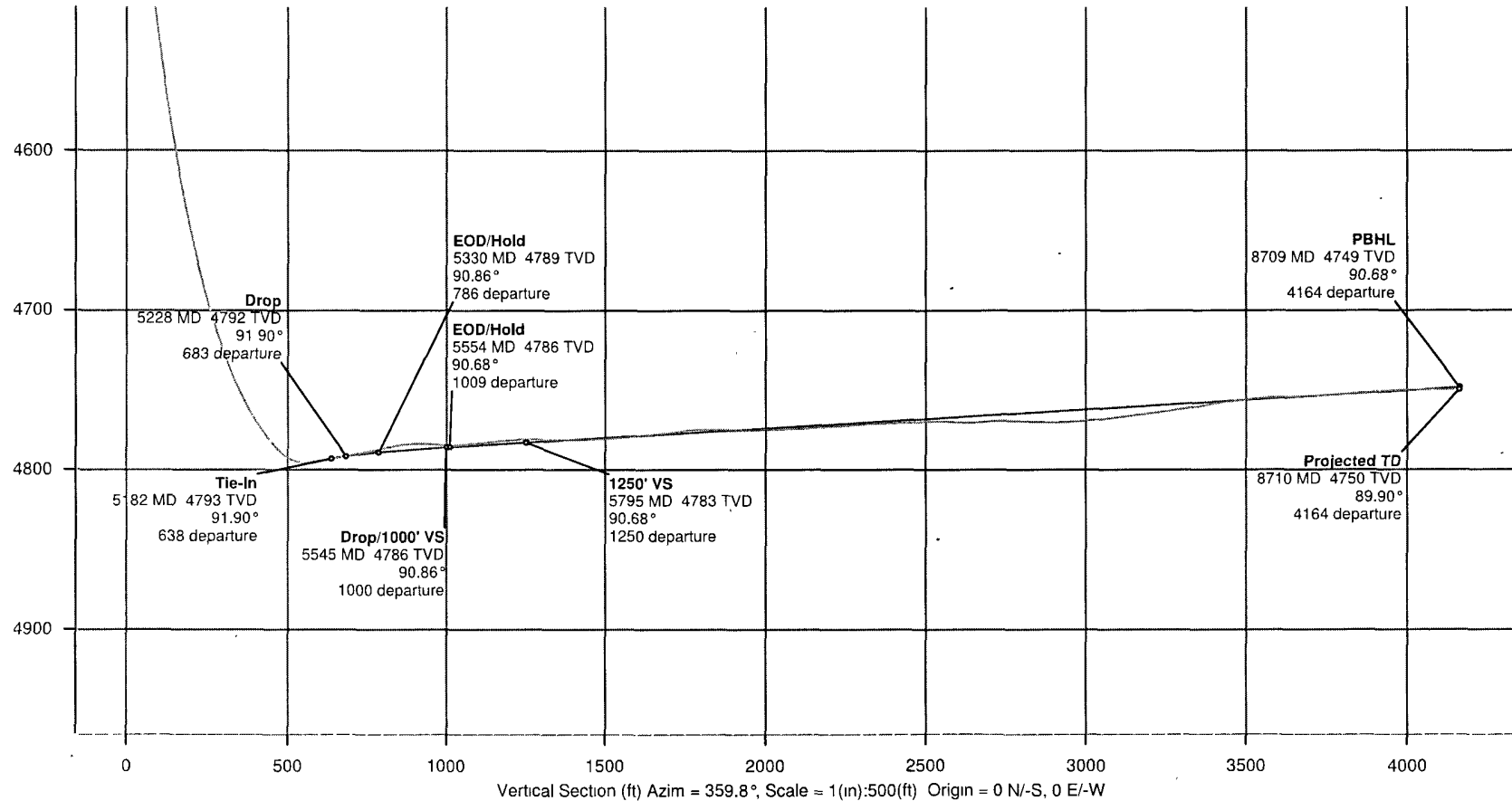


INTREPID
Directional Drilling Specialists



LCX Energy

WELL 1724 Federal Com #292	FIELD Eddy County, NM Nad 83	STRUCTURE 1724 Federal Com #292
Magnetic Parameters Model IGRF 2005 Dip Mag Dec 69.641° FS Date May 01, 2007 49300.5 nT	Surface Location Lat N32 48 1 200 Lon W104 37 2 100 Northings Easting NAD83 New Mexico State Planes 655010.80 NUS 454099.64 EUS Eastern Zone US Feet Grid Conv -0.15380228° Scale Fact 0.999817806	Miscellaneous Slot Plan 1724 Federal Com #292 1724 Federal Com #292 surveys TVD Ref Snv Date RKB (0.00 ft above) May 01, 2007



INTREPID
Directional Drilling Specialists



Survey Report

Report Date: May 9, 2007	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: LCX Energy	Vertical Section Azimuth: 359.802°
Field: Eddy County, NM Nad 83	Vertical Section Origin: N 0.000 ft. E 0.000 ft
Structure / Slot: 1724 Federal Com #292 / 1724 Federal Com #292	TVD Reference Datum: RKB
Well: 1724 Federal Com #292	TVD Reference Elevation: 0.0 ft relative to
Borehole: 1724 Federal Com #292	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8.585°
Survey Name / Date: 1724 Federal Com #292_surveys / May 1, 2007	Total Field Strength: 49300.454 nT
Tort / AHD / DDI / ERD ratio: 160.523° / 4190.76 ft / 6.087 / 0.874	Magnetic Dip: 60.641°
Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: May 01, 2007
Location Lat/Long: N 32 48 1.200, W 104 37 2.100	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 655010.800 ftUS, E 454099.635 ftUS	North Reference: Grid North
Grid Convergence Angle: -0.15380228°	Total Corr Mag North -> Grid North: +8.739°
Grid Scale Factor: 0.99991781	Local Coordinates Referenced To: Well Head

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)
Tie-In	4220.00	0.62	88.91	4219.87	4.67	4.64	-10.32	11.31	294.20	1.13	26.30M
	4250.00	2.80	26.30	4249.86	5.33	5.30	-9.83	11.17	298.32	8.58	13.30M
	4281.00	6.60	13.30	4280.75	7.74	7.71	-9.08	11.91	310.32	12.65	9.97L
	4312.00	10.60	9.50	4311.39	12.29	12.26	-8.20	14.75	326.21	13.03	2.79L
	4344.00	14.10	8.80	4342.65	19.04	19.01	-7.12	20.30	339.47	10.95	3.46R
	4375.00	17.00	9.40	4372.51	27.24	27.22	-5.80	27.83	347.97	9.37	3.71L
	4407.00	20.20	8.80	4402.84	37.31	37.30	-4.19	37.53	353.59	10.02	5.77L
	4439.00	22.90	8.10	4432.60	48.93	48.92	-2.47	48.98	357.11	8.48	13.54L
	4469.00	25.60	6.60	4459.95	61.14	61.14	-0.90	61.15	359.15	9.23	9.36L
	4501.00	28.50	5.60	4488.44	75.61	75.61	0.64	75.61	0.48	9.17	8.45L
	4532.00	31.30	4.80	4515.31	90.99	91.00	2.03	91.02	1.28	9.12	16.18L
	4564.00	33.80	3.50	4542.29	108.16	108.17	3.27	108.22	1.73	8.11	18.72L
	4595.00	35.70	2.40	4567.76	125.80	125.81	4.18	125.88	1.90	6.45	23.78L
	4626.00	38.70	0.30	4592.45	144.53	144.55	4.61	144.62	1.83	10.51	7.87L
	4658.00	42.10	359.60	4616.81	165.27	165.28	4.58	165.35	1.59	10.72	4.19L
	4689.00	45.00	359.30	4639.28	186.62	186.64	4.38	186.69	1.34	9.38	HS
	4721.00	48.00	359.30	4661.30	209.83	209.85	4.09	209.89	1.12	9.38	5.26L
	4752.00	51.40	358.90	4681.35	233.47	233.48	3.72	233.51	0.91	11.01	3.81L
	4783.00	55.10	358.60	4699.90	258.30	258.31	3.18	258.33	0.70	11.96	HS
	4814.00	58.80	358.60	4716.80	284.27	284.28	2.54	284.29	0.51	11.94	4.60R
	4845.00	62.10	358.90	4732.09	311.23	311.24	1.96	311.25	0.36	10.68	HS
	4876.00	65.30	358.90	4745.82	339.02	339.02	1.42	339.03	0.24	10.32	HS
	4907.00	68.60	358.90	4757.96	367.53	367.54	0.88	367.54	0.14	10.65	5.09L
	4938.00	71.80	358.60	4768.45	396.69	396.70	0.24	396.70	0.03	10.36	7.34L
	4969.00	74.80	358.20	4777.36	426.37	426.37	-0.59	426.37	359.92	9.76	6.43L
	5000.00	77.40	357.90	4784.81	456.45	456.44	-1.62	456.45	359.80	8.44	HS
	5029.00	80.90	357.90	4790.27	484.91	484.90	-2.66	484.91	359.69	12.07	HS
	5060.00	84.80	357.90	4794.12	515.65	515.64	-3.79	515.65	359.58	12.58	8.14R
	5091.00	89.70	358.60	4795.61	546.59	546.58	-4.73	546.60	359.50	15.97	HS
	5121.00	91.90	358.60	4795.19	576.58	576.56	-5.46	576.59	359.46	7.33	104.04L
	5152.00	91.80	358.20	4794.19	607.55	607.53	-6.33	607.57	359.40	1.33	71.55L
	5182.00	91.90	357.90	4793.22	637.52	637.50	-7.35	637.54	359.34	1.05	71.55L
	5213.00	92.00	357.60	4792.17	668.48	668.46	-8.57	668.51	359.27	1.02	56.29R
	5243.00	92.20	357.90	4791.07	698.44	698.42	-9.74	698.48	359.20	1.20	63.41L
	5274.00	92.40	357.50	4789.82	729.40	729.37	-10.99	729.45	359.14	1.44	HS
	5306.00	92.60	357.50	4788.43	761.34	761.30	-12.38	761.41	359.07	0.62	105.94R
	5338.00	92.40	358.20	4787.03	793.29	793.25	-13.58	793.37	359.02	2.27	HS
	5368.00	92.70	358.20	4785.70	823.25	823.21	-14.52	823.33	358.99	1.00	134.99R

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)
	5399.00	91.30	359.60	4784.62	854.23	854.18	-15.12	854.31	358.99	6.38	LS
	5431.00	91.00	359.60	4783.97	886.22	886.17	-15.34	886.31	359.01	0.94	LS
	5463.00	89.70	359.60	4783.78	918.22	918.17	-15.56	918.30	359.03	4.06	125.00L
	5525.00	89.00	358.60	4784.48	980.21	980.16	-16.54	980.30	359.03	1.97	46.40R
	5586.00	91.00	0.70	4784.48	1041.20	1041.15	-16.91	1041.29	359.07	4.75	HS
	5650.00	91.10	0.70	4783.31	1105.18	1105.14	-16.13	1105.25	359.16	0.16	90.00L
	5711.00	91.10	0.30	4782.14	1166.17	1166.12	-15.59	1166.23	359.23	0.66	106.69L
	5775.00	90.80	359.30	4781.08	1230.16	1230.11	-15.82	1230.21	359.26	1.63	153.43L
	5839.00	89.40	358.60	4780.97	1294.15	1294.10	-16.99	1294.21	359.25	2.45	HS
	5903.00	89.90	358.60	4781.36	1358.13	1358.08	-18.55	1358.20	359.22	0.78	54.46L
	5967.00	90.40	357.90	4781.19	1422.11	1422.05	-20.51	1422.20	359.17	1.34	90.00L
	6030.00	90.40	357.50	4780.75	1485.07	1485.00	-23.04	1485.17	359.11	0.63	68.74R
	6093.00	91.10	359.30	4779.92	1548.04	1547.96	-24.80	1548.16	359.08	3.07	90.00R
	6157.00	91.10	0.70	4778.70	1612.02	1611.95	-24.80	1612.14	359.12	2.19	---
	6220.00	91.10	0.70	4777.49	1675.01	1674.93	-24.03	1675.10	359.18	0.00	33.68L
	6284.00	91.70	0.30	4775.92	1738.98	1738.91	-23.47	1739.07	359.23	1.13	133.25L
	6348.00	90.10	358.60	4774.92	1802.97	1802.90	-24.08	1803.06	359.23	3.65	102.53L
	6411.00	89.70	356.80	4775.03	1865.92	1865.84	-26.61	1866.03	359.18	2.93	63.44R
	6475.00	89.90	357.20	4775.25	1929.85	1929.75	-29.96	1929.99	359.11	0.70	70.35R
	6539.00	90.40	358.60	4775.08	1993.81	1993.71	-32.31	1993.97	359.07	2.32	104.04L
	6602.00	90.30	358.20	4774.70	2056.79	2056.68	-34.06	2056.96	359.05	0.65	78.68R
	6664.00	90.80	0.70	4774.10	2118.78	2118.67	-34.66	2118.96	359.06	4.11	90.00L
	6727.00	90.80	359.60	4773.22	2181.77	2181.66	-34.49	2181.94	359.09	1.75	123.69L
	6791.00	90.60	359.30	4772.44	2245.76	2245.66	-35.11	2245.93	359.10	0.56	78.21R
	6855.00	91.10	1.70	4771.49	2309.75	2309.64	-34.55	2309.90	359.14	3.83	120.46L
	6918.00	90.10	0.00	4770.83	2372.73	2372.63	-33.62	2372.87	359.19	3.13	79.99R
	6982.00	90.40	1.70	4770.55	2436.72	2436.62	-32.67	2436.84	359.23	2.70	45.00R
	7045.00	90.80	2.10	4769.89	2499.67	2499.58	-30.58	2499.77	359.30	0.90	131.63L
	7109.00	89.20	0.30	4769.89	2563.65	2563.56	-29.24	2563.73	359.35	3.76	63.44R
	7173.00	89.90	1.70	4770.40	2627.63	2627.55	-28.12	2627.70	359.39	2.45	30.25R
	7237.00	91.10	2.40	4769.84	2691.58	2691.50	-25.83	2691.63	359.45	2.17	115.81L
	7301.00	89.60	359.30	4769.45	2755.55	2755.48	-24.88	2755.60	359.48	5.38	90.00R
	7365.00	89.60	0.70	4769.89	2819.55	2819.48	-24.88	2819.59	359.49	2.19	73.30R
	7431.00	89.90	1.70	4770.18	2885.53	2885.47	-23.50	2885.56	359.53	1.58	38.66R
	7494.00	90.40	2.10	4770.02	2948.49	2948.43	-21.41	2948.51	359.58	1.02	29.74L
	7554.00	91.10	1.70	4769.23	3008.44	3008.39	-19.42	3008.45	359.63	1.34	74.04L
	7619.00	91.30	1.00	4767.87	3073.40	3073.36	-17.89	3073.41	359.67	1.12	63.42R
	7682.00	91.50	1.40	4766.33	3136.36	3136.33	-16.57	3136.37	359.70	0.71	90.00L
	7745.00	91.50	1.00	4764.68	3199.32	3199.29	-15.25	3199.33	359.73	0.63	---
	7809.00	91.50	1.00	4763.01	3263.29	3263.26	-14.14	3263.29	359.75	0.00	56.30L
	7873.00	91.70	0.70	4761.22	3327.25	3327.23	-13.19	3327.25	359.77	0.56	30.94R
	7937.00	92.20	1.00	4759.04	3391.20	3391.18	-12.24	3391.20	359.79	0.91	160.02R
	8000.00	91.10	1.40	4757.23	3454.16	3454.14	-10.92	3454.16	359.82	1.86	HS
	8064.00	91.30	1.40	4755.89	3518.12	3518.11	-9.36	3518.12	359.85	0.31	141.34L
	8128.00	90.80	1.00	4754.71	3582.09	3582.08	-8.02	3582.09	359.87	1.00	160.02R
	8192.00	89.70	1.40	4754.43	3646.07	3646.07	-6.68	3646.07	359.90	1.83	28.30R
	8255.00	91.00	2.10	4754.05	3709.03	3709.04	-4.75	3709.04	359.93	2.34	LS
	8319.00	90.60	2.10	4753.16	3772.97	3772.99	-2.41	3772.99	359.96	0.63	HS
	8383.00	90.80	2.10	4752.37	3836.92	3836.94	-0.06	3836.94	360.00	0.31	HS
	8446.00	91.30	2.10	4751.22	3899.85	3899.89	2.25	3899.89	0.03	0.79	165.96R
	8509.00	90.10	2.40	4750.45	3962.79	3962.83	4.72	3962.83	0.07	1.96	45.00L
	8574.00	90.40	2.10	4750.17	4027.73	4027.78	7.27	4027.79	0.10	0.65	LS
	8637.00	90.10	2.10	4749.89	4090.68	4090.74	9.58	4090.75	0.13	0.48	123.69R
Projected TD	8710.00	89.90	2.40	4749.89	4163.61	4163.68	12.44	4163.70	0.17	0.49	---

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)
----------	-----------------------------	------------------------	--------------------	---------------	-------------------------------	--------------	--------------	-------------------	-------------------------------	-----------------------	------------------------------------

A Gyrodata Directional Survey

Field Copy Only, not definitive

for

LCX ENERGY

Location: BIG DOG 2, EDDY COUNTY, NEW MEXICO
Lease: 1724 FED COMM Well: #292, 4-1/2" DRILLPIPE

Job Number: MD0407G_172

Run Date: 4/29/2007 7:39:33 PM

Surveyor: THOMAS BOWDEN

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.800333 deg. N Longitude: 104.617250 deg. W

Azimuth Correction:

Gyro: 0.15000 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

A Gyrodata Directional Survey

LCX ENERGY

Location: BIG DOG 2, EDDY COUNTY, NEW MEXICO

Lease: 1724 FED COMM Well: #292, 4-1/2" DRILLPIPE

Job Number: MD0407G_172

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

0 TO 4220 FT. 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	0.38	142.13	-0.3	0.38	100.00	0.3 142.1	0.26 S 0.21 E
200.00	0.21	169.25	-0.7	0.22	200.00	0.8 147.8	0.71 S 0.44 E
300.00	0.73	357.29	-0.2	0.94	300.00	0.5 118.5	0.24 S 0.45 E
400.00	0.41	8.05	0.8	0.34	399.99	0.9 31.9	0.75 N 0.47 E
500.00	0.31	291.83	1.2	0.45	499.99	1.2 12.7	1.20 N 0.27 E
600.00	0.42	326.16	1.6	0.24	599.99	1.6 353.6	1.61 N 0.18 W
700.00	0.54	3.68	2.4	0.33	699.98	2.4 351.5	2.38 N 0.36 W
800.00	0.53	6.46	3.3	0.03	799.98	3.3 355.3	3.31 N 0.27 W
900.00	0.88	24.17	4.5	0.41	899.97	4.5 1.2	4.47 N 0.09 E
1000.00	0.85	21.25	5.8	0.05	999.96	5.9 6.6	5.85 N 0.67 E
1100.00	0.83	26.14	7.2	0.07	1099.95	7.3 9.9	7.19 N 1.26 E
1200.00	0.58	30.63	8.3	0.25	1199.94	8.5 12.5	8.28 N 1.84 E
1300.00	0.24	23.71	8.9	0.35	1299.94	9.2 13.8	8.91 N 2.18 E
1400.00	0.28	23.66	9.3	0.05	1399.94	9.6 14.2	9.32 N 2.36 E
1500.00	0.18	10.99	9.7	0.11	1499.94	10.0 14.4	9.71 N 2.49 E
1600.00	0.13	20.31	10.0	0.06	1599.94	10.3 14.4	9.97 N 2.56 E
1700.00	0.20	356.54	10.3	0.09	1699.94	10.6 14.2	10.25 N 2.59 E
1800.00	0.11	252.28	10.4	0.25	1799.94	10.7 13.5	10.40 N 2.49 E
1900.00	0.13	255.40	10.3	0.02	1899.94	10.6 12.5	10.34 N 2.29 E

A Gyrodata Directional Survey

LCX ENERGY

Location: BIG DOG 2, EDDY COUNTY, NEW MEXICO

Lease: 1724 FED COMM Well: #292, 4-1/2" DRILLPIPE

Job Number: MD0407G_172

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2000.00	0.27	241.56	10.2	0.14	1999.94	10.4 11.0	10.20 N 1.98 E
2100.00	0.29	237.88	10.0	0.03	2099.93	10.1 8.9	9.96 N 1.56 E
2200.00	0.31	247.32	9.7	0.05	2199.93	9.8 6.4	9.72 N 1.10 E
2300.00	0.27	251.28	9.5	0.04	2299.93	9.6 3.8	9.54 N 0.63 E
2400.00	0.34	240.43	9.3	0.09	2399.93	9.3 0.9	9.32 N 0.15 E
2500.00	0.36	249.30	9.1	0.06	2499.93	9.1 357.5	9.06 N 0.40 W
2600.00	0.40	256.84	8.9	0.07	2599.93	8.9 353.3	8.87 N 1.04 W
2700.00	0.33	274.35	8.8	0.13	2699.92	9.0 349.3	8.81 N 1.67 W
2800.00	0.38	279.18	8.9	0.06	2799.92	9.2 345.6	8.89 N 2.27 W
2900.00	0.42	269.20	8.9	0.08	2899.92	9.4 341.6	8.93 N 2.97 W
3000.00	0.50	269.04	8.9	0.07	2999.92	9.7 337.1	8.92 N 3.77 W
3100.00	0.51	263.04	8.9	0.05	3099.91	10.0 332.3	8.86 N 4.65 W
3200.00	0.83	250.19	8.6	0.35	3199.91	10.3 326.0	8.56 N 5.78 W
3270.40	0.70	240.39	8.2	0.26	3270.30	10.5 320.9	8.17 N 6.63 W
3364.36	0.67	242.43	7.6	0.04	3364.25	10.8 315.0	7.63 N 7.63 W
3458.32	0.67	233.64	7.0	0.11	3458.21	11.1 309.5	7.05 N 8.56 W
3552.28	0.54	236.42	6.5	0.15	3552.16	11.4 304.6	6.48 N 9.37 W
3646.24	0.44	237.63	6.0	0.11	3646.12	11.7 301.0	6.04 N 10.05 W
3740.20	0.23	241.45	5.8	0.22	3740.08	12.0 298.7	5.76 N 10.52 W
3834.16	0.15	237.56	5.6	0.09	3834.04	12.2 297.4	5.60 N 10.79 W
3928.12	0.21	219.76	5.4	0.08	3928.00	12.3 296.2	5.41 N 11.00 W
4022.08	0.24	167.73	5.1	0.21	4021.95	12.2 294.7	5.08 N 11.06 W
4116.04	0.19	142.77	4.8	0.11	4115.91	11.9 293.6	4.76 N 10.92 W

A Gyrodata Directional Survey

LCX ENERGY

Location: BIG DOG 2, EDDY COUNTY, NEW MEXICO

Lease: 1724 FED COMM Well: #292, 4-1/2" DRILLPIPE

Job Number: MD0407G_172

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4210.00	0.50	90.11	4.6	0.44	4209.87	11.4 294.0	4.64 N 10.41 W
4220.00	0.62	88.91	4.6	1.13	4219.87	11.3 294.2	4.64 N 10.32 W

Final Station Closure: Distance: 11.31 ft Az: 294.20 deg.