

MAR 30 2009
OCD-ARTESIA

Rm

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO 1004-0137
Expires July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5 Lease Serial No NM 109642	
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 ST. MARY LAND & EXPLORATION COMPANY 154903		7 Unit or CA Agreement Name and No.	
3 Address 3300 N. "A" ST., BLDG 7, #200, MIDLAND, TX 79705		8 Lease Name and Well No CONNIE 19 FED COM E, WELL #1	
3a. Phone No (include area code) 432 688-1789/684-6381		9 AFI Well No 30 015 36395	
4 Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 2000' FNL & 100' FWL (E) SL At top prod interval reported below At total depth 2000' FNL & 330' FEL (H)		10 Field and Pool or Exploratory UND GROW PLATS WOLFCAMP 9775	
11 Sec, T, R, M, on Block and Survey or Area Sec 19, T16S, R29E		12 County or Parish EDDY	
13 State NM		17 Elevations (DF, RKB, RT, GL)* 3580	
14 Date Spudded 10/07/2008		15 Date T D Reached 11/23/2008	
16 Date Completed 01/27/2009 ☐ D & A ☒ Ready to Prod		18 Total Depth MD 11,048' TVD 6903'	
19 Plug Back T D MD 10,646' TVD		20 Depth Bridge Plug Set MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR/CCL, Dual Laterolog, Sonic		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" H40	48#	0	340'		325 sx Cl C		surface	none
12 1/4"	9 5/8" J55	40#	0	2380'		900 sx Cl C		surface	none
8 3/4"	7" P110	26#	0	7465'		630 sx Cl H		5300' calc	none
6 1/8"	4 1/2" P110	11.6#	6318'	10,646'					none

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 7/8"	6270'							

25 Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No Holes	Perf Status
A) Wolfcamp	6974'	7400'	7036'; 7867'	1 - port		open
B)			8881'; 9659'; 10,648'	1 - port		open
C)						
D)						

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

Depth Interval	Amount and Type of Material
7036-10,648'	97,000 gals 15% acid; 410,800 frac fluid w/77,500# 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
2-1-09	2-23-09	24	→	61	57	274	40		pumping
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

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	
			→						

MAR 28 2009

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

*(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)

Sales

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
BUREAU OF MGMT CIVIL ENGINEERING DEPT	7:55	DEPT		Yates	600
				Seven Rivers	810
				Queen	1345
				San Andres	2165
				Glorelea	3640
				Abo	5650
				Wolfcamp	6974'

32 Additional remarks (include plugging procedure)

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

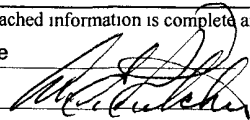
- ☒ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other

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) Ann E Ritchie

Title Regulatory Agent

Signature



Date 03/05/2009

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

(Continued on page 3)

(Form 3160-4, page 2)

CONNIE 19 FED. COM. E #1

EDDY, NEW MEXICO

LEASE & WELL

(Give Unit, Section, Township and Range)

OPERATOR

ST MARY LAND & EXPLORATION 3100 N A ST BLDG #7, STE 200

MIDLAND, TEXAS 79705

DRILLING CONTRACTOR

NABORS DRILLING USA, LP

The Undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

RECEIVED
MAR 02 2009
MIDLAND

DEGREES @ DEPTH		DEGREES @ DEPTH		DEGREES @ DEPTH		DEGREES @ DEPTH	
2.0	340	1.12	3013				
3.2	1483	1.8	3470				
3.24	1576	1.38	3942				
3.86	1661	1.0	4493				
4.34	1702	1.78	4735				
4.1	1799	1.65	5208				
3.62	1845	1.07	5684				
2.69	1912	0.87	6031				
2.69	1943	1.33	6640				
1.58	2006						
2.35	2034						
1.64	2070						
1.51	2166						
1.2	2262						
1.09	2506						

Drilling Contractor

Nabors Drilling USA, LP

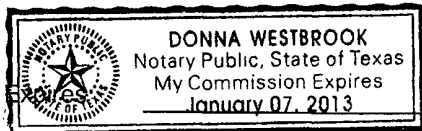
By

Keith Dunn Marketing-Contracts Manager

Subscribed and sworn to before me this 26 day of February, 2009

Notary Public

My Commission Expires



MIDLAND

County

TEXAS



Tuesday, November 25, 2008

St. Mary's Land & Exploration
Connie 19 Fed Com E #1
Eddy Co., NM.

Leam MWD; from 6455' – 11000'

This Borehole Survey taken between 10/31/2008 and 11/21/2008 has been conducted and calculated according to the highest professional standards and complies with all known State and federal requirements.

Reviewed and Approved:

Date:

Signature:

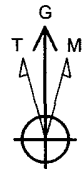
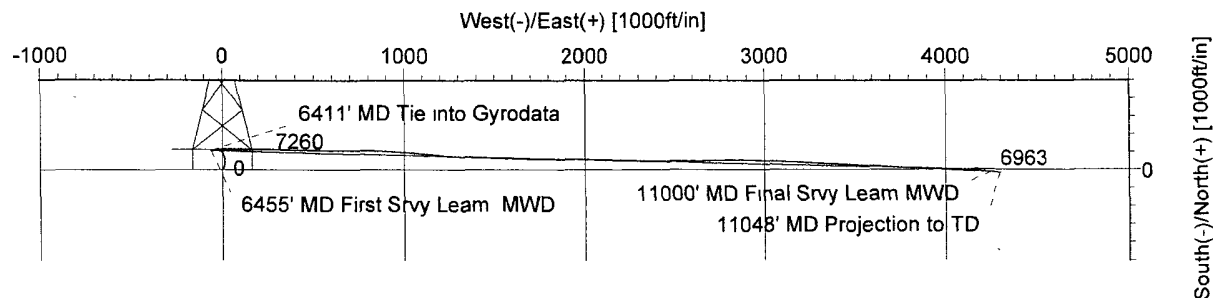


Tony LoRicco
Well Planner

Physical & Mailing: 100 I-45 North Ste. 110, Conroe, TX 77301
936-756-7577 • 936-756-7595 Fax • 1 (800) 756-7504 • E-mail: cnfrontdesk@leam.net

ST MARY'S LAND & EXPLORATION CO.

Field Eddy County, New Mexico
 Site: Connie 19 Federal Com "E"
 Well: #1
 Wellpath: OH
 Survey: Survey #2



Azimuths to Grid North
 True North: -0.12°
 Magnetic North: 8.16°

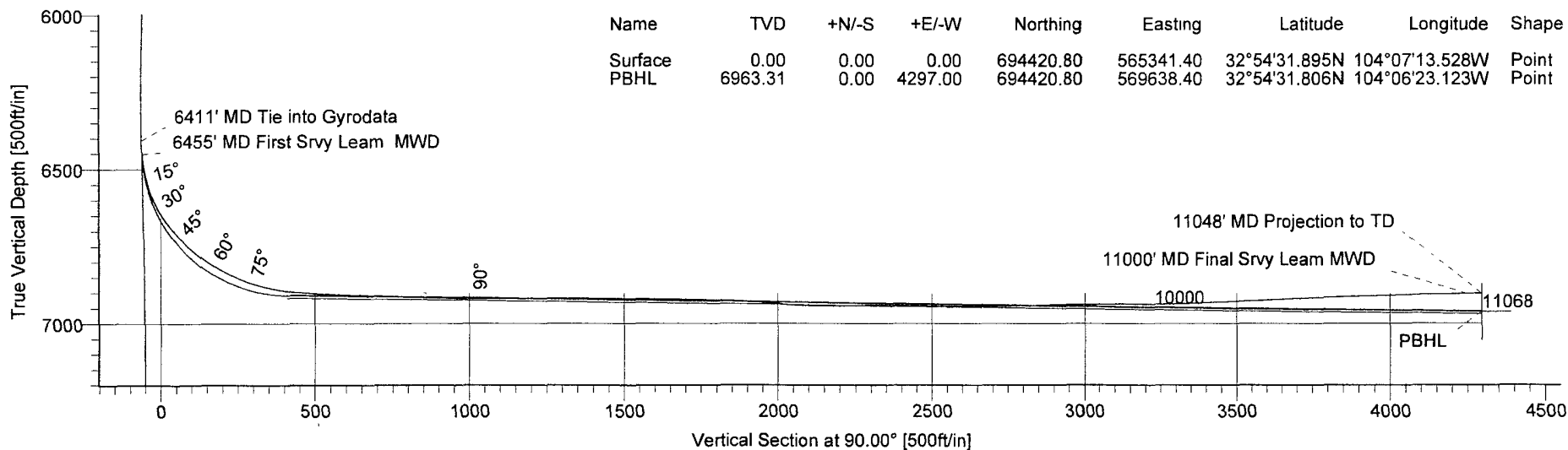
Magnetic Field
 Strength: 49291nT
 Dip Angle: 60.80°
 Date: 9/2/2008
 Model: bggm2007

SECTION DETAILS

There are no section details

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Surface	0.00	0.00	0.00	694420.80	565341.40	32°54'31.895N	104°07'13.528W	Point
PBHL	6963.31	0.00	4297.00	694420.80	569638.40	32°54'31.806N	104°06'23.123W	Point



LEAM DRILLING SYSTEMS, INC.
 101 Industrial Court Conroe, Texas 77301
 Phone: 936-756-7577 Fax: 936-756-7595

Survey Survey #2 (#1/OH)
 Created By: Angie Friesse Date: 2/26/2009
 Checked: _____ Date: _____
 Reviewed: _____ Date: _____

Company: ST MARY'S LAND & EXPLORATION C
 Field: Eddy County, New Mexico
 Site: Connie 19 Federal Com "E"
 Well: #1
 Wellpath: OH

Date: 2/26/2009 Time: 09:53:29 Page: 1
 Co-ordinate(NE) Reference: Site: Connie 19 Federal Com "E"
 Vertical (TVD) Reference: SITE 3580.4
 Section (VS) Reference: Well (0.00N,0.00E,90.00Azi)
 Survey Calculation Method: Minimum Curvature Db: Adapti

Survey: Survey #2 Start Date: 11/5/2008
 Company: Leam Drilling Systems, Inc. Engineer:
 Tool: MWD;Std MWD Tied-to: From: Definitive Path

Well: #1 Slot Name:
 Well Position: +N/-S 0.00 ft Northing: 694420 80 ft Latitude: 32 54 31.895 N
 +E/-W 0.00 ft Easting : 565341 40 ft Longitude: 104 7 13 528 W
 Position Uncertainty: 0.00 ft

Annotation

MD ft	TVD ft	
6411.00	6407.97	6411' MD Tie into Gyrodata
6455.00	6451.92	6455' MD First Srvy Leam MWD
11000.00	6903.69	11000' MD Final Srvy Leam MWD
11048.00	6902.68	11048' MD Projection to TD

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	ClsD ft	ClsAzim deg	Dogleg deg/100ft	
6411.00	1.14	94.77	6407.97	108.80	-62.32	-62.32	125.39	330.20	0.00	6411' MD Tie into Gyrodata
6455.00	4.00	78.50	6451.92	109.07	-60.38	-60.38	124.67	331.03	6.65	6455' MD First Srvy Leam MWD
6487.00	7.70	78.10	6483.75	109.74	-57.19	-57.19	123.75	332.47	11.56	
6519.00	12.00	79.20	6515.27	110.80	-51.82	-51.82	122.32	334.93	13.45	
6550.00	16.10	81.30	6545.34	112.06	-44.40	-44.40	120.54	338.38	13.33	
6580.00	20.20	83.80	6573.84	113.25	-35.14	-35.14	118.57	342.76	13.91	
6612.00	25.20	85.90	6603.35	114.33	-22.84	-22.84	116.59	348.70	15.83	
6644.00	29.60	86.40	6631.76	115.32	-8.15	-8.15	115.60	355.96	13.77	
6676.00	34.30	88.00	6658.90	116.13	8.75	8.75	116.46	4.31	14.92	
6707.00	38.10	89.40	6683.91	116.53	27.05	27.05	119.63	13.07	12.54	
6739.00	41.20	90.40	6708.55	116.56	47.47	47.47	125.86	22.16	9.89	
6771.00	44.70	90.60	6731.97	116.37	69.27	69.27	135.43	30.76	10.95	
6803.00	48.00	90.10	6754.05	116.23	92.42	92.42	148.50	38.49	10.37	
6835.00	51.70	89.90	6774.68	116.23	116.88	116.88	164.83	45.16	11.57	
6899.00	58.40	89.40	6811.33	116.56	169.30	169.30	205.55	55.45	10.49	
6931.00	60.90	90.30	6827.49	116.63	196.91	196.91	228.86	59.36	8.18	
6963.00	64.40	91.10	6842.19	116.28	225.33	225.33	253.56	62.70	11.16	
6996.00	67.50	92.40	6855.64	115.36	255.45	255.45	280.29	65.70	10.06	
7028.00	71.50	92.90	6866.84	113.97	285.38	285.38	307.30	68.23	12.59	
7060.00	74.80	92.20	6876.12	112.61	315.97	315.97	335.44	70.38	10.52	
7090.00	77.50	91.70	6883.30	111.62	345.08	345.08	362.68	72.08	9.14	
7123.00	79.90	91.00	6889.77	110.86	377.43	377.43	393.37	73.63	7.56	
7155.00	82.00	90.80	6894.80	110.36	409.03	409.03	423.65	74.90	6.59	
7187.00	84.60	90.40	6898.53	110.03	440.80	440.80	454.33	75.98	8.22	
7219.00	85.70	90.40	6901.24	109.81	472.69	472.69	485.27	76.92	3.44	
7251.00	86.80	90.40	6903.33	109.58	504.62	504.62	516.38	77.75	3.44	
7283.00	87.70	90.40	6904.87	109.36	536.58	536.58	547.61	78.48	2.81	
7314.00	87.70	90.40	6906.11	109.14	567.55	567.55	577.95	79.11	0.00	
7345.00	88.30	90.30	6907.19	108.95	598.53	598.53	608.37	79.68	1.96	
7377.00	88.60	90.40	6908.06	108.76	630.52	630.52	639.83	80.21	0.99	
7409.00	88.30	90.40	6908.92	108.54	662.51	662.51	671.34	80.70	0.94	
7518.00	87.60	89.60	6912.82	108.54	771.44	771.44	779.04	81.99	0.97	
7613.00	87.90	93.40	6916.55	106.05	866.31	866.31	872.78	83.02	4.01	
7709.00	89.10	93.40	6919.07	100.36	962.11	962.11	967.33	84.04	1.25	
7804.00	90.10	94.10	6919.73	94.15	1056.90	1056.90	1061.09	84.91	1.28	
7900.00	91.00	94.80	6918.81	86.70	1152.61	1152.61	1155.86	85.70	1.19	

Company: ST MARY'S LAND & EXPLORATION.C
 Field: Eddy County, New Mexico
 Site: Connie 19 Federal Com "E"
 Well: #1
 Wellpath: OH

Date: 2/26/2009 Time: 09:53:29 Page: 2
 Co-ordinate(NE) Reference: Site: Connie 19 Federal Com "E"
 Vertical (TVD) Reference: SITE 3580.4
 Section (VS) Reference: Well (0.00N,0.00E,90.00Azi)
 Survey Calculation Method: Minimum Curvature Db: Adapti

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	ClsD ft	ClsAzim. deg	Dogleg deg/100ft	
7995.00	90.30	94.80	6917.73	78.75	1247.27	1247.27	1249.75	86.39	0.74	
8090.00	89.50	93.10	6917.90	72.21	1342.04	1342.04	1343.98	86.92	1.98	
8185.00	89.50	91.30	6918.72	68.56	1436.96	1436.96	1438.59	87.27	1.89	
8281.00	89.60	91.80	6919.48	65.96	1532.92	1532.92	1534.34	87.54	0.53	
8377.00	89.30	91.80	6920.40	62.95	1628.87	1628.87	1630.09	87.79	0.31	
8472.00	89.00	91.80	6921.81	59.96	1723.81	1723.81	1724.86	88.01	0.32	
8568.00	88.00	90.80	6924.32	57.79	1819.75	1819.75	1820.67	88.18	1.47	
8664.00	85.20	89.70	6930.02	57.37	1915.57	1915.57	1916.43	88.28	3.13	
8761.00	85.40	90.10	6937.96	57.54	2012.25	2012.25	2013.07	88.36	0.46	
8856.00	89.00	90.90	6942.60	56.71	2107.11	2107.11	2107.87	88.46	3.88	
8951.00	90.80	91.50	6942.77	54.72	2202.09	2202.09	2202.77	88.58	2.00	
9046.00	90.60	91.30	6941.61	52.40	2297.05	2297.05	2297.65	88.69	0.30	
9143.00	89.50	90.60	6941.52	50.79	2394.04	2394.04	2394.57	88.78	1.34	
9203.00	88.60	90.10	6942.52	50.42	2454.03	2454.03	2454.54	88.82	1.72	
9235.00	88.30	90.40	6943.38	50.28	2486.01	2486.01	2486.52	88.84	1.33	
9331.00	89.90	90.10	6944.89	49.86	2582.00	2582.00	2582.48	88.89	1.70	
9427.00	90.40	87.80	6944.64	51.62	2677.97	2677.97	2678.47	88.90	2.45	
9522.00	91.60	89.20	6942.98	54.11	2772.92	2772.92	2773.45	88.88	1.94	
9618.00	92.20	90.60	6939.80	54.28	2868.87	2868.87	2869.38	88.92	1.59	
9713.00	90.00	92.40	6937.98	51.79	2963.81	2963.81	2964.26	89.00	2.99	
9809.00	91.00	92.00	6937.14	48.10	3059.73	3059.73	3060.11	89.10	1.12	
9904.00	89.40	92.90	6936.81	44.04	3154.64	3154.64	3154.95	89.20	1.93	
10000.00	90.00	92.40	6937.31	39.61	3250.54	3250.54	3250.78	89.30	0.81	
10096.00	92.90	92.40	6934.88	35.59	3346.41	3346.41	3346.60	89.39	3.02	
10191.00	92.20	92.90	6930.65	31.20	3441.21	3441.21	3441.35	89.48	0.91	
10284.00	92.80	92.90	6926.60	26.50	3534.01	3534.01	3534.10	89.57	0.65	
10381.00	92.60	93.20	6922.03	21.34	3630.76	3630.76	3630.82	89.66	0.37	
10476.00	92.20	93.20	6918.05	16.04	3725.53	3725.53	3725.56	89.75	0.42	
10574.00	92.20	93.40	6914.29	10.41	3823.29	3823.29	3823.31	89.84	0.20	
10670.00	91.50	92.70	6911.19	5.30	3919.11	3919.11	3919.11	89.92	1.03	
10766.00	91.60	93.40	6908.59	0.20	4014.94	4014.94	4014.94	90.00	0.74	
10861.00	91.00	92.70	6906.44	-4.86	4109.78	4109.78	4109.78	90.07	0.97	
10954.00	91.20	94.10	6904.65	-10.37	4202.59	4202.59	4202.61	90.14	1.52	
11000.00	91.20	94.10	6903.69	-13.66	4248.46	4248.46	4248.49	90.18	0.00	11000' MD Final Srvy Leam MWD
11048.00	91.20	94.10	6902.68	-17.09	4296.33	4296.33	4296.37	90.23	0.00	11048' MD Projection to TD

Company: ST MARY'S LAND & EXPLORATION C
 Field: Eddy County, New Mexico
 Site: Connie 19 Federal Com "E"
 Well: #1
 Wellpath: OH

Date: 2/26/2009 Time: 09:54:28 Page: 1
 Co-ordinate(NE) Reference: Site: Connie 19 Federal Com "E"
 Vertical (TVD) Reference: SITE 3580.4
 Section (VS) Reference: Well (0.00N,0.00E,90.00Azi)
 Survey Calculation Method: Minimum Curvature Db: Adapti

Survey: Survey #2 Start Date: 11/5/2008
 Company: Leam Drilling Systems, Inc. Engineer:
 Tool: MWD;Std MWD Tied-to: From: Definitive Path

Well: #1 Slot Name:
 Well Position: +N-S 0.00 ft Northing: 694420 80 ft Latitude: 32 54 31.895 N
 +E-W 0.00 ft Easting: 565341 40 ft Longitude: 104 7 13.528 W
 Position Uncertainty: 0.00 ft

Annotation

MD ft	TVD ft	
6411.00	6407.97	6411' MD Tie into Gyrodata
6455.00	6451.92	6455' MD First Srvy Leam MWD
11000.00	6903.69	11000' MD Final Srvy Leam MWD
11048.00	6902.68	11048' MD Projection to TD

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	MapN ft	MapE ft	Lat	Long
6411.00	1.14	94.77	6407.97	108.80	-62.32	694529.60	565279.08	32 54	32.973 N104 7 14.256 W
6455.00	4.00	78.50	6451.92	109.07	-60.38	694529.87	565281.02	32 54	32.975 N104 7 14.234 W
6487.00	7.70	78.10	6483.75	109.74	-57.19	694530.54	565284.21	32 54	32.982 N104 7 14.196 W
6519.00	12.00	79.20	6515.27	110.80	-51.82	694531.60	565289.58	32 54	32.992 N104 7 14.133 W
6550.00	16.10	81.30	6545.34	112.06	-44.40	694532.86	565297.00	32 54	33.005 N104 7 14.046 W
6580.00	20.20	83.80	6573.84	113.25	-35.14	694534.05	565306.26	32 54	33.016 N104 7 13.937 W
6612.00	25.20	85.90	6603.35	114.33	-22.84	694535.13	565318.56	32 54	33.027 N104 7 13.793 W
6644.00	29.60	86.40	6631.76	115.32	-8.15	694536.12	565333.25	32 54	33.036 N104 7 13.621 W
6676.00	34.30	88.00	6658.90	116.13	8.75	694536.93	565350.15	32 54	33.044 N104 7 13.422 W
6707.00	38.10	89.40	6683.91	116.53	27.05	694537.33	565368.45	32 54	33.047 N104 7 13.208 W
6739.00	41.20	90.40	6708.55	116.56	47.47	694537.36	565388.87	32 54	33.047 N104 7 12.968 W
6771.00	44.70	90.60	6731.97	116.37	69.27	694537.17	565410.67	32 54	33.045 N104 7 12.713 W
6803.00	48.00	90.10	6754.05	116.23	92.42	694537.03	565433.82	32 54	33.043 N104 7 12.441 W
6835.00	51.70	89.90	6774.68	116.23	116.88	694537.03	565458.28	32 54	33.043 N104 7 12.154 W
6899.00	58.40	89.40	6811.33	116.56	169.30	694537.36	565510.70	32 54	33.045 N104 7 11.539 W
6931.00	60.90	90.30	6827.49	116.63	196.91	694537.43	565538.31	32 54	33.045 N104 7 11.215 W
6963.00	64.40	91.10	6842.19	116.28	225.33	694537.08	565566.73	32 54	33.041 N104 7 10.882 W
6996.00	67.50	92.40	6855.64	115.36	255.45	694536.16	565596.85	32 54	33.031 N104 7 10.529 W
7028.00	71.50	92.90	6866.84	113.97	285.38	694534.77	565626.78	32 54	33.017 N104 7 10.178 W
7060.00	74.80	92.20	6876.12	112.61	315.97	694533.41	565657.37	32 54	33.003 N104 7 9.819 W
7090.00	77.50	91.70	6883.30	111.62	345.08	694532.42	565686.48	32 54	32.992 N104 7 9.477 W
7123.00	79.90	91.00	6889.77	110.86	377.43	694531.66	565718.83	32 54	32.984 N104 7 9.098 W
7155.00	82.00	90.80	6894.80	110.36	409.03	694531.16	565750.43	32 54	32.979 N104 7 8.727 W
7187.00	84.60	90.40	6898.53	110.03	440.80	694530.83	565782.20	32 54	32.975 N104 7 8.355 W
7219.00	85.70	90.40	6901.24	109.81	472.69	694530.61	565814.09	32 54	32.972 N104 7 7.981 W
7251.00	86.80	90.40	6903.33	109.58	504.62	694530.38	565846.02	32 54	32.969 N104 7 7.606 W
7283.00	87.70	90.40	6904.87	109.36	536.58	694530.16	565877.98	32 54	32.966 N104 7 7.231 W
7314.00	87.70	90.40	6906.11	109.14	567.55	694529.94	565908.95	32 54	32.963 N104 7 6.868 W
7345.00	88.30	90.30	6907.19	108.95	598.53	694529.75	565939.93	32 54	32.961 N104 7 6.504 W
7377.00	88.60	90.40	6908.06	108.76	630.52	694529.56	565971.92	32 54	32.958 N104 7 6.129 W
7409.00	88.30	90.40	6908.92	108.54	662.51	694529.34	566003.91	32 54	32.956 N104 7 5.754 W
7518.00	87.60	89.60	6912.82	108.54	771.44	694529.34	566112.84	32 54	32.953 N104 7 4.476 W
7613.00	87.90	93.40	6916.55	106.05	866.31	694526.85	566207.71	32 54	32.927 N104 7 3.363 W
7709.00	89.10	93.40	6919.07	100.36	962.11	694521.16	566303.51	32 54	32.869 N104 7 2.240 W
7804.00	90.10	94.10	6919.73	94.15	1056.90	694514.95	566398.30	32 54	32.805 N104 7 1.128 W
7900.00	91.00	94.80	6918.81	86.70	1152.61	694507.50	566494.01	32 54	32.730 N104 7 0.005 W

Company: ST MARY'S LAND & EXPLORATION C
 Field: Eddy County, New Mexico
 Site: Connie 19 Federal Com "E"
 Well: #1
 Wellpath: OH

Date: 2/26/2009 Time: 09:54:28 Page: 2
 Co-ordinate(NE) Reference: Site: Connie 19 Federal Com "E"
 Vertical (TVD) Reference: SITE 3580.4
 Section (VS) Reference: Well (0.00N,0.00E;90.00Azi)
 Survey Calculation Method: Minimum Curvature Db: Adapti

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	MapN ft	MapE ft	Lat	Long				
7995.00	90.30	94.80	6917.73	78.75	1247.27	694499.55	566588.67	32.54	32.649	N104	6	58.895	W
8090.00	89.50	93.10	6917.90	72.21	1342.04	694493.01	566683.44	32.54	32.582	N104	6	57.784	W
8185.00	89.50	91.30	6918.72	68.56	1436.96	694489.36	566778.36	32.54	32.544	N104	6	56.670	W
8281.00	89.60	91.80	6919.48	65.96	1532.92	694486.76	566874.32	32.54	32.517	N104	6	55.545	W
8377.00	89.30	91.80	6920.40	62.95	1628.87	694483.75	566970.27	32.54	32.485	N104	6	54.419	W
8472.00	89.00	91.80	6921.81	59.96	1723.81	694480.76	567065.21	32.54	32.453	N104	6	53.306	W
8568.00	88.00	90.80	6924.32	57.79	1819.75	694478.59	567161.15	32.54	32.430	N104	6	52.180	W
8664.00	85.20	89.70	6930.02	57.37	1915.57	694478.17	567256.97	32.54	32.424	N104	6	51.056	W
8761.00	85.40	90.10	6937.96	57.54	2012.25	694478.34	567353.65	32.54	32.423	N104	6	49.922	W
8856.00	89.00	90.90	6942.60	56.71	2107.11	694477.51	567448.51	32.54	32.413	N104	6	48.810	W
8951.00	90.80	91.50	6942.77	54.72	2202.09	694475.52	567543.49	32.54	32.392	N104	6	47.696	W
9046.00	90.60	91.30	6941.61	52.40	2297.05	694473.20	567638.45	32.54	32.367	N104	6	46.582	W
9143.00	89.50	90.60	6941.52	50.79	2394.04	694471.59	567735.44	32.54	32.349	N104	6	45.444	W
9203.00	88.60	90.10	6942.52	50.42	2454.03	694471.22	567795.43	32.54	32.344	N104	6	44.740	W
9235.00	88.30	90.40	6943.38	50.28	2486.01	694471.08	567827.41	32.54	32.342	N104	6	44.365	W
9331.00	89.90	90.10	6944.89	49.86	2582.00	694470.66	567923.40	32.54	32.336	N104	6	43.239	W
9427.00	90.40	87.80	6944.64	51.62	2677.97	694472.42	568019.37	32.54	32.351	N104	6	42.113	W
9522.00	91.60	89.20	6942.98	54.11	2772.92	694474.91	568114.32	32.54	32.374	N104	6	41.000	W
9618.00	92.20	90.60	6939.80	54.28	2868.87	694475.08	568210.27	32.54	32.373	N104	6	39.874	W
9713.00	90.00	92.40	6937.98	51.79	2963.81	694472.59	568305.21	32.54	32.347	N104	6	38.761	W
9809.00	91.00	92.00	6937.14	48.10	3059.73	694468.90	568401.13	32.54	32.308	N104	6	37.635	W
9904.00	89.40	92.90	6936.81	44.04	3154.64	694464.84	568496.04	32.54	32.266	N104	6	36.522	W
10000.00	90.00	92.40	6937.31	39.61	3250.54	694460.41	568591.94	32.54	32.220	N104	6	35.397	W
10096.00	92.90	92.40	6934.88	35.59	3346.41	694456.39	568687.81	32.54	32.178	N104	6	34.273	W
10191.00	92.20	92.90	6930.65	31.20	3441.21	694452.00	568782.61	32.54	32.133	N104	6	33.161	W
10284.00	92.80	92.90	6926.60	26.50	3534.01	694447.30	568875.41	32.54	32.085	N104	6	32.073	W
10381.00	92.60	93.20	6922.03	21.34	3630.76	694442.14	568972.16	32.54	32.032	N104	6	30.938	W
10476.00	92.20	93.20	6918.05	16.04	3725.53	694436.84	569066.93	32.54	31.977	N104	6	29.826	W
10574.00	92.20	93.40	6914.29	10.41	3823.29	694431.21	569164.69	32.54	31.919	N104	6	28.680	W
10670.00	91.50	92.70	6911.19	5.30	3919.11	694426.10	569260.51	32.54	31.867	N104	6	27.556	W
10766.00	91.60	93.40	6908.59	0.20	4014.94	694421.00	569356.34	32.54	31.814	N104	6	26.432	W
10861.00	91.00	92.70	6906.44	-4.86	4109.78	694415.94	569451.18	32.54	31.762	N104	6	25.320	W
10954.00	91.20	94.10	6904.65	-10.37	4202.59	694410.43	569543.99	32.54	31.706	N104	6	24.231	W
11000.00	91.20	94.10	6903.69	-13.66	4248.46	694407.14	569589.86	32.54	31.672	N104	6	23.693	W
11048.00	91.20	94.10	6902.68	-17.09	4296.33	694403.71	569637.73	32.54	31.637	N104	6	23.132	W

Survey Report

MINIMUM CURVATURE CALCULATION

Operator	St. Mary's
Well Name	Connie 19 Fed Com E #1
Location	Eddy County, New Mexico
Start Date	10/31/2008
End Date	11/21/2008
Direction	90



SUR NUM	MD ft	INC °	AZM °	TVD ft	N-S ft	E-W ft	SECT ft	DLS °/100'
TIE IN	6411	1.14	94.76	6408.53	108.82	-62.29	-62.29	0.7
1	6455	4.0	78.5	6452.48	109.09	-60.35	-60.35	6.6
2	6487	7.7	78.1	6484.31	109.75	-57.16	-57.16	11.6
3	6519	12.0	79.2	6515.83	110.82	-51.79	-51.79	13.4
4	6550	16.1	81.3	6545.90	112.07	-44.37	-44.37	13.3
5	6580	20.2	83.8	6574.40	113.26	-35.11	-35.11	13.9
6	6612	25.2	85.9	6603.91	114.35	-22.81	-22.81	15.8
7	6644	29.6	86.4	6632.31	115.33	-8.12	-8.12	13.8
8	6676	34.3	88.0	6659.46	116.14	8.79	8.79	14.9
9	6707	38.1	89.4	6684.47	116.55	27.09	27.09	12.5
10	6739	41.2	90.4	6709.11	116.58	47.50	47.50	9.9
11	6771	44.7	90.6	6732.53	116.39	69.30	69.30	10.9
12	6803	48.0	90.1	6754.61	116.25	92.45	92.45	10.4
13	6835	51.7	89.9	6775.24	116.25	116.91	116.91	11.6
14	6899	58.4	89.4	6811.88	116.58	169.33	169.33	10.5
15	6931	60.9	90.3	6828.05	116.65	196.95	196.95	8.2
16	6963	64.4	91.1	6842.75	116.30	225.36	225.36	11.2
17	6996	67.5	92.4	6856.20	115.37	255.48	255.48	10.1
18	7028	71.5	92.9	6867.40	113.99	285.41	285.41	12.6
19	7060	74.8	92.2	6876.68	112.63	316.01	316.01	10.5
20	7090	77.5	91.7	6883.86	111.64	345.11	345.11	9.1
21	7123	79.9	91.0	6890.32	110.87	377.46	377.46	7.6
22	7155	82.0	90.8	6895.36	110.38	409.06	409.06	6.6
23	7187	84.6	90.4	6899.09	110.05	440.84	440.84	8.2
24	7219	85.7	90.4	6901.79	109.82	472.72	472.72	3.4
25	7251	86.8	90.4	6903.89	109.60	504.65	504.65	3.4
26	7283	87.7	90.4	6905.42	109.38	536.61	536.61	2.8

Survey Report

MINIMUM CURVATURE CALCULATION

Operator	St. Mary's
Well Name	Connie 19 Fed Com E #1
Location	Eddy County, New Mexico
Start Date	10/31/2008
End Date	11/21/2008
Direction	90



SUR NUM	MD ft	INC °	AZM °	TVD ft	N-S ft	E-W ft	SECT ft	DLS °/100'
27	7314	87.7	90.4	6906.67	109.16	567.59	567.59	0.0
28	7345	88.3	90.3	6907.75	108.97	598.57	598.57	2.0
29	7377	88.6	90.4	6908.61	108.78	630.55	630.55	1.0
30	7409	88.3	90.4	6909.48	108.55	662.54	662.54	0.9
31	7518	87.6	89.6	6913.38	108.55	771.47	771.47	1.0
32	7613	87.9	93.4	6917.11	106.07	866.35	866.35	4.0
33	7709	89.1	93.4	6919.62	100.38	962.14	962.14	1.3
34	7804	90.1	94.1	6920.29	94.16	1056.94	1056.94	1.3
35	7900	91.0	94.8	6919.36	86.72	1152.64	1152.64	1.2
36	7995	90.3	94.8	6918.29	78.77	1247.30	1247.30	0.7
37	8090	89.5	93.1	6918.45	72.22	1342.07	1342.07	2.0
38	8185	89.5	91.3	6919.28	68.58	1436.99	1436.99	1.9
39	8281	89.6	91.8	6920.04	65.98	1532.95	1532.95	0.5
40	8377	89.3	91.8	6920.96	62.96	1628.90	1628.90	0.3
41	8472	89.0	91.8	6922.37	59.98	1723.85	1723.85	0.3
42	8568	88.0	90.8	6924.88	57.80	1819.79	1819.79	1.5
43	8664	85.2	89.7	6930.57	57.38	1915.60	1915.60	3.1
44	8761	85.4	90.1	6938.52	57.55	2012.28	2012.28	0.5
45	8856	89.0	90.9	6943.16	56.72	2107.14	2107.14	3.9
46	8951	90.8	91.5	6943.33	54.73	2202.12	2202.12	2.0
47	9046	90.6	91.3	6942.17	52.41	2297.08	2297.08	0.3
48	9143	89.5	90.6	6942.08	50.81	2394.07	2394.07	1.3
49	9203	88.6	90.1	6943.08	50.44	2454.06	2454.06	1.7
50	9235	88.3	90.4	6943.94	50.30	2486.05	2486.05	1.3
51	9331	89.9	90.1	6945.45	49.88	2582.03	2582.03	1.7
52	9427	90.4	87.8	6945.20	51.64	2678.01	2678.01	2.5
53	9522	91.6	89.2	6943.54	54.13	2772.96	2772.96	1.9

Survey Report

MINIMUM CURVATURE CALCULATION

Operator	St. Mary's
Well Name	Connie 19 Fed Com E #1
Location	Eddy County, New Mexico
Start Date	10/31/2008
End Date	11/21/2008
Direction	90



SUR NUM	MD ft	INC °	AZM °	TVD ft	N-S ft	E-W ft	SECT ft	DLS °/100'
54	9618	92.2	90.6	6940.36	54.29	2868.90	2868.90	1.6
55	9713	90.0	92.4	6938.53	51.81	2963.84	2963.84	3.0
56	9809	91.0	92.0	6937.70	48.12	3059.76	3059.76	1.1
57	9904	89.4	92.9	6937.36	44.06	3154.67	3154.67	1.9
58	10000	90.0	92.4	6937.87	39.62	3250.57	3250.57	0.8
59	10096	92.9	92.4	6935.44	35.60	3346.44	3346.44	3.0
60	10191	92.2	92.9	6931.21	31.22	3441.25	3441.25	0.9
61	10284	92.8	92.9	6927.15	26.52	3534.04	3534.04	0.6
62	10381	92.6	93.2	6922.59	21.36	3630.79	3630.79	0.4
63	10476	92.2	93.2	6918.61	16.06	3725.56	3725.56	0.4
64	10574	92.2	93.4	6914.85	10.42	3823.33	3823.33	0.2
65	10670	91.5	92.7	6911.75	5.32	3919.14	3919.14	1.0
66	10766	91.6	93.4	6909.15	0.21	4014.97	4014.97	0.7
67	10861	91.0	92.7	6906.99	-4.84	4109.81	4109.81	1.0
68	10954	91.2	94.1	6905.21	-10.35	4202.62	4202.62	1.5
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