

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM 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

b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other: _____

2. Name of Operator
Yates Petroleum Corporation

3. Address
105 S. 4th Str., Artesia, NM 88210

3a. Phone No. (include area code)
505-748-1471

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

At Surface 190'FSL & 760'FWL (Unit M, SWSW)

At top prod. Interval reported below

Same as above

BHL 1077'FSL & 696'FWL (Unit M, SWSW)

14. Date Spudded
RH 5/7/07 RT 5/14/07

15. Date T.D. Reached
7/2/07

16. Date Completed 9/5/07
☐ D & A ☒ Ready to Prod

18. Total Depth: MD 8836'
TVD NA

19. Plug Back T.D.: MD 8430'
TVD NA

20. Depth Bridge Plug Set: MD 8430'
TVD NA

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

CNL, Hi-Res Laterolog Array, CBL

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)	State Cement Depth	No. of Sks & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
26"	20"	Cond.	Surface	40'				Surface	
17-1/2"	13-3/8"	48#	Surface	298'		853 sx		Surface	
12-1/4"	9-5/8"	36#	Surface	2035'		1075 sx		Surface	
8-3/4"	5-1/2"	17#	Surface	8836'		2005 sx		6860'Est	

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"	8173'	8173'						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Morrow	8362'	8378'	8441'-8494'		24	Under CIBP
B)			8362'-8378'		102	Producing
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
8441'-8444'	Acidize w/500g 7-1/2% HCL MSA w/20 ball sealers
8362'-8378'	Acidize w/1500g 7-1/2% HCL MSA w/90 ball sealers

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
9/6/07	9/11/07	24	→	0	799	153	NA	NA	Flowing
Choke Size	Tbg. Press. Flwg.	Csg. Press. Packer	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
14/64"	900 psi		→	0	799	153	NA		

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.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

ACCEPTED FOR RECORD
Producing

SEP 18 2007

JERRY FANT
PETROLEUM GEOLOGIST

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.	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.	Csg. Press.	24 Hr Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

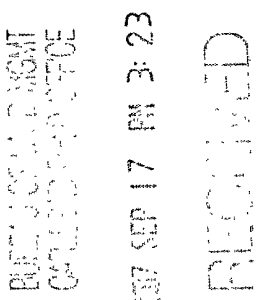
29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones 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

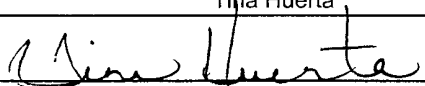
Formation	Top	Bottom	Description, Contents, etc.	Name	Top
					Meas Depth
				Wolfcamp	4910'
				Cisco	6022'
				Lower Canyon	6928'
				Strawn	7465'
				Atoka	7972'
				Morrow	8256'
				Chester	8772'

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 Deviation survey

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) Tina Huerta Title Regulatory Compliance Supervisor
 Signature  Date September 11, 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

(Continued on page 3)

(Form 3160-4, page2)

INCLINATION REPORT		
2. LEASE NAME MESCAL SE FED #2		
3. OPERATOR YATES PETROLEUM		
4. ADDRESS 105 SOUTH 4TH ST. ARTESSIA, NM 88210		
		County EDDY

RECORD OF INCLINATION

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle x100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
200	2.00	1.50	2.62	5.24	5.24
830	6.30	1.75	3.05	19.21	24.45
1374	5.44	1.00	1.75	9.52	33.97
1891	5.17	1.00	1.75	9.04	43.01
2035	1.44	1.00	1.75	2.52	45.53
2445	4.10	3.50	6.11	25.05	70.58
2916	4.71	19.00	33.16	156.18	226.76
3321	4.05	27.75	48.43	196.14	422.90
3730	4.09	31.50	54.98	224.86	647.76
4232	5.02	26.50	46.25	232.17	879.93
4607	3.75	19.50	34.03	127.61	1,007.54
4953	3.46	7.75	13.53	46.81	1,054.35
5488	5.35	3.00	5.24	28.03	1,082.38
5913	4.25	2.00	3.49	14.83	1,097.21
6463	5.50	1.25	2.18	11.99	1,109.20
6871	4.08	0.25	0.44	1.79	1,110.99
7164	2.93	0.25	0.44	1.28	1,112.27
7592	4.28	0.75	1.31	5.60	1,117.87
7875	2.83	0.50	0.87	2.46	1,120.33
8375	5.00	0.50	0.87	4.35	1,124.68
8822	4.47	2.75	4.80	21.45	1,146.13

Bill

Drilling Manager
Lariat Services, Inc.
432-561-5510

Sworn to and subscribed before me this 18th day of July 2007



Lucy V. Soto
Notary Public Signature



Gyrodata Incorporated
3811 S. Co. Rd. 1285
Odessa, TX. 79765

432/561-8458
Fax: 432/563-7982

SURVEY REPORT
Yates Petroleum
Mescal Fed No. 2
Lariat No. 31
Eddy County, New Mexico
MD0507G_198

24 May 2007

A Gyrodata Directional Survey

for

YATES PETROLEUM

Lease: Mescal Fed Well: No. 2, 4-1/2" Drillpipe
Location: Lariat No. 31, Eddy County, New Mexico

Job Number: MD0507G_198

Run Date: 24 May 2007

Surveyor: Henry Drew

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.471389 deg. N Longitude: 104.746028 deg. W

Azimuth Correction:

Gyro: Bearings are Relative to True 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

Yates Petroleum

Lease: Mescal Fed Well: No. 2, 4-1/2" Drillpipe

Location: Lariat No. 31, Eddy County, New Mexico

Job Number: MD0507G_198

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. 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 TO 2056 FT. RATE GYROSCOPIC MULTISHOT RUN INSIDE 4-1/2 DRILLPIPE									
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO LARIAT NO. 31 R.K.B.									

100.00	0.91	209.55	S 29 33 W	0.91	100.00	0.8	209.6	0.69 S	0.39 W
200.00	0.72	195.25	S 15 15 W	0.28	199.99	2.2	205.5	1.99 S	0.95 W
300.00	0.73	166.13	S 13 52 E	0.37	299.98	3.4	196.6	3.21 S	0.96 W
400.00	1.08	177.55	S 2 27 E	0.39	399.97	4.8	189.1	4.77 S	0.77 W
500.00	1.17	178.38	S 1 37 E	0.10	499.95	6.8	185.9	6.74 S	0.70 W
600.00	1.51	177.21	S 2 47 E	0.34	599.92	9.1	183.8	9.08 S	0.60 W
700.00	1.67	190.71	S 10 42 W	0.41	699.88	11.9	183.9	11.83 S	0.81 W
800.00	1.73	182.87	S 2 52 W	0.24	799.84	14.8	184.5	14.78 S	1.16 W
900.00	1.79	177.38	S 2 37 E	0.18	899.79	17.9	183.7	17.85 S	1.16 W
1000.00	1.92	175.65	S 4 21 E	0.14	999.74	21.1	182.6	21.08 S	0.96 W
1100.00	1.68	177.44	S 2 34 E	0.24	1099.69	24.2	181.8	24.22 S	0.77 W
1200.00	1.46	183.12	S 3 7 W	0.27	1199.65	27.0	181.6	26.96 S	0.78 W
1300.00	1.31	193.09	S 13 6 W	0.29	1299.62	29.4	182.2	29.34 S	1.10 W
1400.00	1.48	216.28	S 36 17 W	0.59	1399.59	31.6	183.9	31.50 S	2.13 W
1500.00	1.59	227.27	S 47 16 W	0.31	1499.56	33.7	186.7	33.48 S	3.91 W
1600.00	1.57	229.02	S 49 1 W	0.05	1599.52	35.8	189.6	35.32 S	5.96 W
1700.00	1.60	226.76	S 46 46 W	0.07	1699.48	38.0	192.2	37.17 S	8.01 W
1800.00	1.28	229.88	S 49 53 W	0.34	1799.45	40.1	194.3	38.85 S	9.89 W
1900.00	1.06	230.86	S 50 51 W	0.21	1899.43	41.8	195.9	40.16 S	11.46 W
2000.00	1.00	229.86	S 49 51 W	0.07	1999.41	43.3	197.3	41.30 S	12.84 W

A Gyrodata Directional Survey

Yates Petroleum

Lease: Mescal Fed Well: No. 2, 4-1/2" Drillpipe

Location: Lariat No. 31, Eddy County, New Mexico

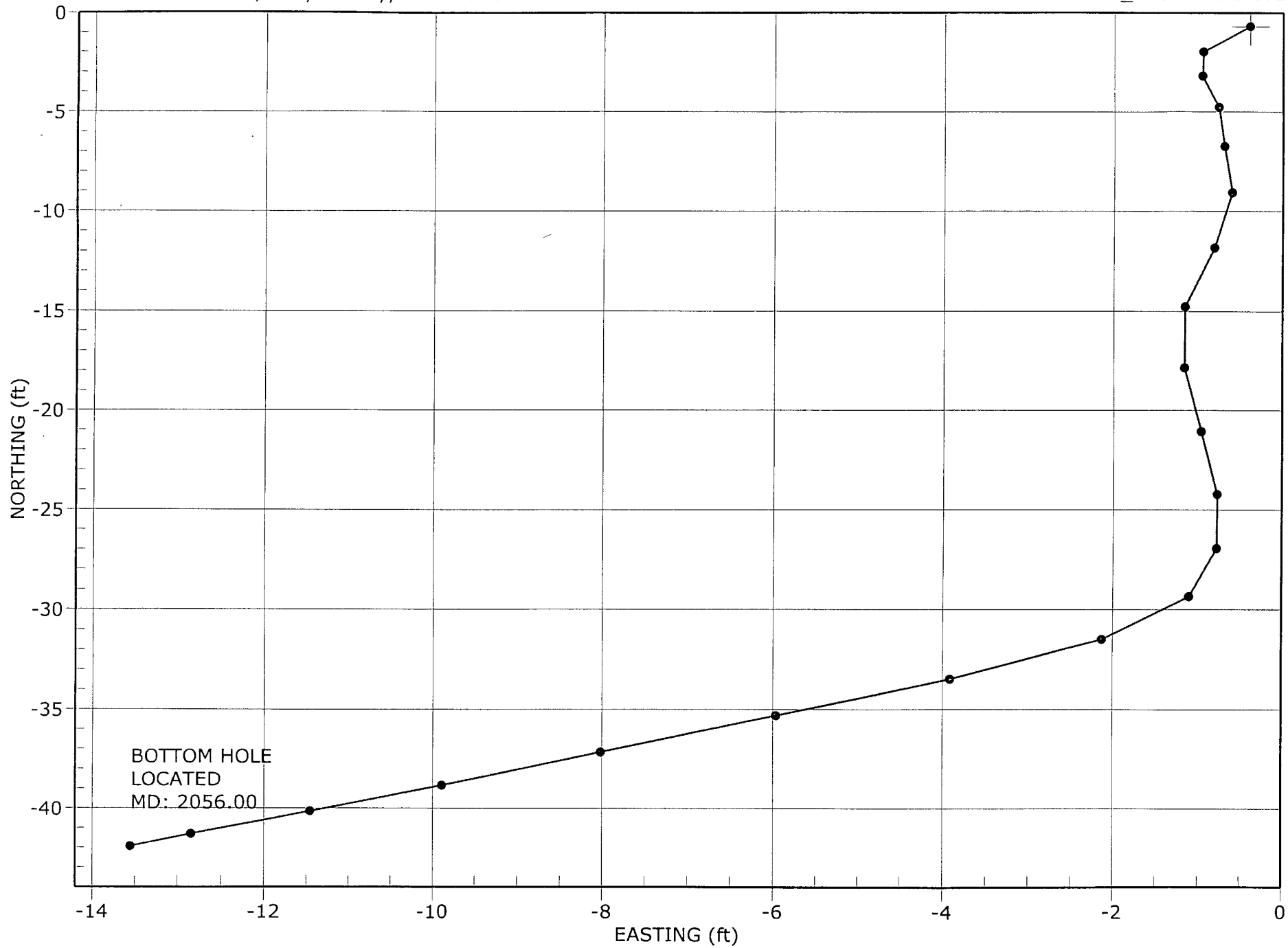
Job Number: MD0507G_198

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
2056.00	0.94	227.12	S 47 7 W	0.12	2055.40	44.1 197.9	41.93 S 13.55 W

Final Station Closure: Distance: 44.07 ft Az: 197.91 deg.

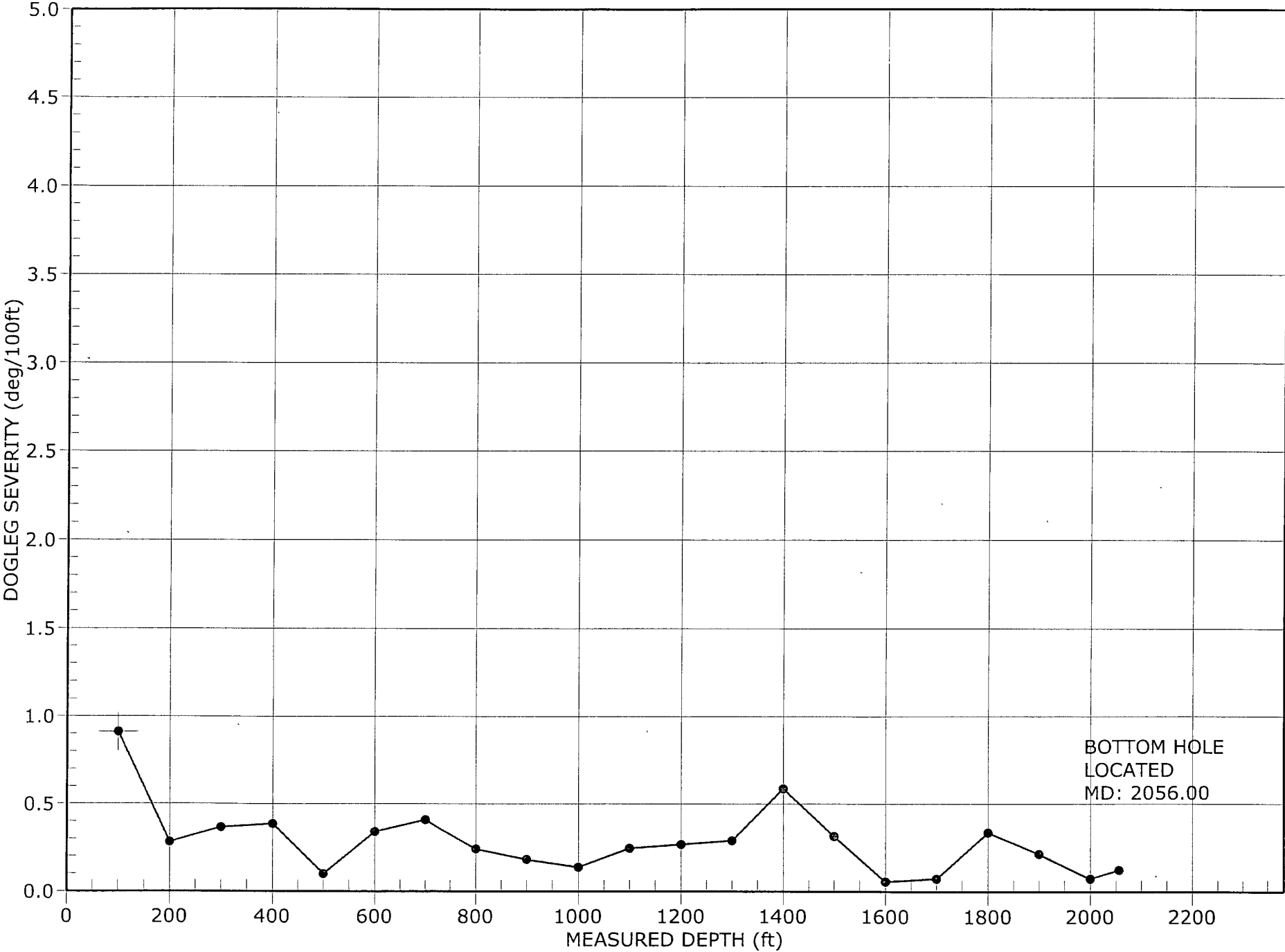
Yates Petroleum
Well: Mescal Fed No. 2 4-1/2" Drillpipe
Location: Lariat No. 31, Eddy County, New Mexico

Inrun
Gyrodata
MD0507G_198 DEFINITIVE



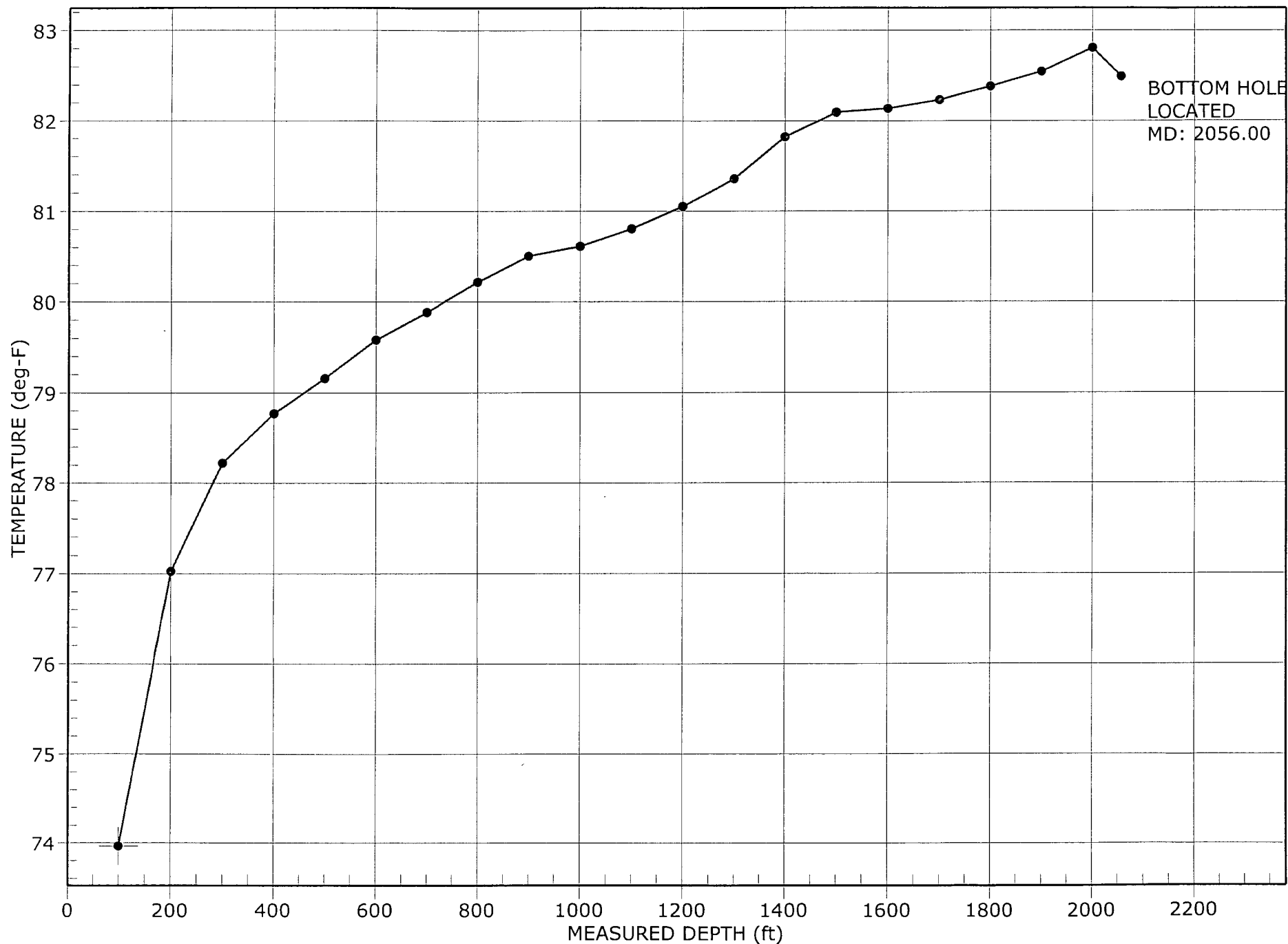
Yates Petroleum
Well: Mescal Fed No. 2 4-1/2" Drillpipe
Location: Lariat No. 31, Eddy County, New Mexico

Inrun
Gyrodata
MD0507G_198 DEFINITIVE



Yates Petroleum
Well: Mescal Fed No. 2 4-1/2" Drillpipe
Location: Lariat No. 31, Eddy County, New Mexico

Inrun
Gyrodata
MD0507G_198 DEFINITIVE



DIRECTIONAL SURVEY REPORT

YATES PETROLEUM

MESCAL #2

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) TREVOR SUTTON
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 04/20/07 TO 04/29/07
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
MESCAL #2
EDDY COUNTY, NM
RIG: LARIAT #31
9. SURVEY CERTIFIED FROM: 2099 TO 5964 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 889.95 FEET ON A BEARING OF 355.89 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 6007 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



Francisco Sinisterra
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 06/15/2007
Date Completed: 06/15/2007

YATES PETROLEUM
MESCAL #2
Eddy COUNTY, New Mexico
Rig:Lariat # 31
PathFinder Office Supervisor: Marcus Mitcham
PathFinder Field Engineers:T. Sutton

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.28.17.0184 N LON:104.44.45.8196 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 372715.0299 Y: 535452.4746
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.82° EAST TO GRID
Vertical Section Plane: 356.63
Survey Vert. Reference: 19.50' Kelly Bushing To Ground
Altitude:4515.00' Ground To MSL

Measured Depth	6007.00	(feet)
Inclination	1.57	(deg)
Azimuth	209.65	(deg)
True Vertical Depth	5797.36	(feet)
Vertical Section	889.88	(feet)
Survey X cord	372651.31	(feet)
Survey Y cord	536340.14	(feet)
Survey Lat	32.47383336 N	(deg)
Survey Lon	104.74627873 W	(deg)
Rectangular Corr. N/S	887.67 N	(feet)
Rectangular Corr. E/W	63.72 W	(feet)
Closure Distance	889.95	(feet)
Direction of Closure	355.89	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM

MESCAL #2

Eddy COUNTY, New Mexico

Rig:Lariat # 31

PathFinder Office Supervisor: Marcus Mitcham

PathFinder Field Engineers: T. Sutton

Survey Horiz. Reference:WELLHEAD

Ref Coordinates: LAT:32.28.17.0184 N LON:104.44.45.8196 W

Reference:NAD27 new mexico east Transverse Mercator

Ref GRID Coord: X: 372715.0299 Y: 535452.4746

North Aligned To:GRID NORTH

Total Magnetic Correction: 8.82° EAST TO GRID

Vertical Section Plane: 356.63

Survey Vert. Reference: 19.50' Kelly Bushing To Ground

Altitude:4515.00' Ground To MSL

Survey Calculations by PathCalc v1.95U using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Retangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
The following are Gyrodata surveys.										
0.00	0.00	0.00	-0.00	0.00	-0.03	0.03 S	0.00 E	0.03@	175.54	0.00
100.00	0.91	209.55	99.99	100.00	-0.70	0.72 S	0.39 W	0.82@	208.31	0.91
200.00	0.72	195.25	199.98	100.00	-1.96	2.02 S	0.95 W	2.23@	205.10	0.28
300.00	0.73	166.13	299.97	100.00	-3.18	3.24 S	0.96 W	3.38@	196.46	0.36
400.00	1.08	177.55	399.96	100.00	-4.75	4.80 S	0.77 W	4.86@	189.06	0.39
500.00	1.17	178.38	499.94	100.00	-6.71	6.77 S	0.70 W	6.80@	185.88	0.09
600.00	1.51	177.21	599.92	100.00	-9.05	9.10 S	0.60 W	9.12@	183.79	0.34
700.00	1.67	190.71	699.88	100.00	-11.78	11.85 S	0.81 W	11.88@	183.91	0.41
800.00	1.73	182.87	799.83	100.00	-14.70	14.79 S	1.16 W	14.83@	184.47	0.24
900.00	1.79	177.38	899.79	100.00	-17.76	17.86 S	1.16 W	17.90@	183.72	0.18
1000.00	1.92	175.65	999.73	100.00	-21.00	21.09 S	0.96 W	21.11@	182.61	0.14
1100.00	1.68	177.44	1099.68	100.00	-24.14	24.22 S	0.77 W	24.24@	181.82	0.25
1200.00	1.46	183.12	1199.65	100.00	-26.87	26.96 S	0.77 W	26.97@	181.64	0.27
1300.00	1.31	193.09	1299.62	100.00	-29.23	29.34 S	1.10 W	29.37@	182.15	0.28
1400.00	1.48	216.28	1399.59	100.00	-31.32	31.50 S	2.12 W	31.57@	183.86	0.58
1500.00	1.59	227.27	1499.55	100.00	-33.19	33.48 S	3.91 W	33.71@	186.66	0.31
1600.00	1.57	229.02	1599.51	100.00	-34.91	35.32 S	5.96 W	35.82@	189.58	0.05
1700.00	1.60	226.76	1699.48	100.00	-36.64	37.18 S	8.01 W	38.03@	192.16	0.07
1800.00	1.28	229.88	1799.45	100.00	-38.20	38.85 S	9.88 W	40.09@	194.27	0.33
1900.00	1.06	230.86	1899.42	100.00	-39.41	40.16 S	11.46 W	41.76@	195.92	0.22
2000.00	1.00	229.86	1999.41	100.00	-40.48	41.30 S	12.84 W	43.25@	197.27	0.06
** Tie-in to Gyrodata.										
2056.00	0.94	227.12	2055.40	56.00	-41.06	41.93 S	13.55 W	44.07@	197.91	0.14

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
MESCAL #2
Eddy COUNTY, New Mexico
RIG:Lariat # 31

Page 02/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Retangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
The following are Pathfinder MWD surveys.										
2099.00	1.06	304.66	2098.40	43.00	-41.04	41.94 S	14.14 W	44.26@	198.62	2.92
2131.00	1.85	323.56	2130.38	32.00	-40.43	41.36 S	14.69 W	43.89@	199.55	2.86
2162.00	1.93	327.87	2161.37	31.00	-39.55	40.52 S	15.26 W	43.29@	200.64	0.53
2194.00	2.20	335.34	2193.35	32.00	-38.50	39.50 S	15.80 W	42.54@	201.81	1.19
2225.00	2.29	338.76	2224.32	31.00	-37.36	38.38 S	16.28 W	41.69@	202.98	0.52
2256.00	2.37	345.53	2255.30	31.00	-36.14	37.18 S	16.66 W	40.75@	204.13	0.92
2287.00	2.37	349.84	2286.27	31.00	-34.88	35.93 S	16.93 W	39.72@	205.23	0.57
2319.00	2.37	353.00	2318.24	32.00	-33.56	34.63 S	17.13 W	38.63@	206.32	0.41
2350.00	2.46	3.90	2349.22	31.00	-32.26	33.33 S	17.16 W	37.49@	207.25	1.51
2382.00	2.90	4.16	2381.18	32.00	-30.78	31.83 S	17.06 W	36.12@	208.19	1.38
2413.00	3.25	6.19	2412.14	31.00	-29.13	30.18 S	16.91 W	34.59@	209.26	1.18
2445.00	3.61	5.31	2444.08	32.00	-27.24	28.27 S	16.72 W	32.84@	210.59	1.14
2476.00	3.87	9.00	2475.01	31.00	-25.25	26.27 S	16.46 W	31.00@	212.08	1.14
2508.00	4.13	8.47	2506.94	32.00	-23.07	24.06 S	16.12 W	28.96@	213.83	0.82
2539.00	4.48	7.50	2537.85	31.00	-20.79	21.76 S	15.80 W	26.89@	215.99	1.15
2570.00	4.75	7.06	2568.75	31.00	-18.34	19.28 S	15.49 W	24.73@	218.77	0.88
2602.00	5.63	6.63	2600.62	32.00	-15.49	16.41 S	15.14 W	22.33@	222.70	2.75
2633.00	6.51	6.19	2631.44	31.00	-12.26	13.15 S	14.78 W	19.78@	228.33	2.84
2664.00	7.83	3.90	2662.20	31.00	-8.43	9.30 S	14.44 W	17.18@	237.23	4.36
2695.00	8.97	2.76	2692.87	31.00	-3.93	4.78 S	14.18 W	14.97@	251.39	3.72
2727.00	11.08	3.64	2724.38	32.00	1.60	0.79 N	13.87 W	13.89@	273.24	6.61
2758.00	13.10	2.67	2754.69	31.00	8.05	7.27 N	13.51 W	15.35@	298.27	6.55
2790.00	14.42	1.09	2785.77	32.00	15.63	14.87 N	13.27 W	19.93@	318.26	4.29
2821.00	15.48	0.38	2815.72	31.00	23.61	22.87 N	13.17 W	26.39@	330.07	3.47
2853.00	16.97	1.09	2846.44	32.00	32.52	31.81 N	13.05 W	34.38@	337.69	4.70
2884.00	18.64	0.82	2875.96	31.00	41.98	41.29 N	12.90 W	43.26@	342.66	5.39

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
MESCAL #2
Eddy COUNTY, New Mexico
RIG:Lariat # 31

Page 03/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
2916.00	18.91	0.91	2906.25	32.00	52.25	51.59 N	12.74 W	53.14@	346.13	0.85
2947.00	18.99	0.91	2935.57	31.00	62.29	61.65 N	12.58 W	62.92@	348.47	0.26
2979.00	19.17	1.44	2965.82	32.00	72.71	72.11 N	12.36 W	73.16@	350.27	0.78
3010.00	19.52	0.56	2995.07	31.00	82.95	82.38 N	12.19 W	83.27@	351.59	1.47
3038.00	20.31	1.79	3021.39	28.00	92.46	91.91 N	11.99 W	92.69@	352.57	3.19
3070.00	20.58	1.53	3051.38	32.00	103.59	103.09 N	11.67 W	103.74@	353.54	0.89
3101.00	21.46	1.97	3080.31	31.00	114.67	114.20 N	11.32 W	114.76@	354.34	2.88
3132.00	22.25	3.46	3109.08	31.00	126.14	125.73 N	10.78 W	126.19@	355.10	3.11
3164.00	23.13	5.04	3138.61	32.00	138.37	138.03 N	9.86 W	138.39@	355.92	3.34
3195.00	24.45	3.37	3166.97	31.00	150.77	150.50 N	8.95 W	150.77@	356.60	4.78
3227.00	25.76	2.41	3195.95	32.00	164.27	164.06 N	8.26 W	164.27@	357.12	4.29
3258.00	26.38	1.88	3223.80	31.00	177.83	177.68 N	7.75 W	177.85@	357.50	2.14
3290.00	26.91	4.69	3252.40	32.00	192.08	192.00 N	6.93 W	192.13@	357.93	4.27
3321.00	27.79	4.69	3279.93	31.00	206.18	206.19 N	5.76 W	206.28@	358.40	2.84
3352.00	28.75	3.29	3307.23	31.00	220.74	220.84 N	4.75 W	220.89@	358.77	3.76
3384.00	29.37	4.34	3335.21	32.00	236.16	236.35 N	3.71 W	236.38@	359.10	2.51
3415.00	29.90	3.72	3362.15	31.00	251.36	251.64 N	2.63 W	251.65@	359.40	1.98
3447.00	30.51	2.85	3389.81	32.00	267.35	267.71 N	1.71 W	267.72@	359.63	2.35
3478.00	31.04	1.00	3416.44	31.00	283.14	283.56 N	1.18 W	283.56@	359.76	3.50
3509.00	31.48	359.51	3442.94	31.00	299.20	299.65 N	1.11 W	299.65@	359.79	2.87
3541.00	31.74	359.59	3470.19	32.00	315.95	316.42 N	1.24 W	316.42@	359.77	0.82
3572.00	31.13	359.51	3496.64	31.00	332.09	332.59 N	1.37 W	332.59@	359.76	1.97
3604.00	30.60	357.40	3524.11	32.00	348.50	348.99 N	1.81 W	349.00@	359.70	3.77
3635.00	30.07	357.48	3550.87	31.00	364.15	364.64 N	2.51 W	364.64@	359.61	1.71
3667.00	30.25	354.50	3578.54	32.00	380.22	380.67 N	3.63 W	380.69@	359.45	4.71
3698.00	30.95	355.11	3605.22	31.00	396.00	396.38 N	5.06 W	396.42@	359.27	2.47
3730.00	31.66	353.71	3632.56	32.00	412.61	412.93 N	6.68 W	412.99@	359.07	3.18

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
MESCAL #2
Eddy COUNTY, New Mexico
RIG:Lariat # 31

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Retangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
3761.00	32.27	356.52	3658.86	31.00	429.01	429.28 N	8.08 W	429.36@	358.92	5.19
3792.00	32.62	355.46	3685.02	31.00	445.64	445.87 N	9.24 W	445.96@	358.81	2.15
3823.00	32.89	354.14	3711.10	31.00	462.40	462.57 N	10.76 W	462.70@	358.67	2.46
3855.00	32.89	355.73	3737.97	32.00	479.77	479.88 N	12.30 W	480.04@	358.53	2.70
3887.00	32.98	353.88	3764.83	32.00	497.16	497.20 N	13.87 W	497.40@	358.40	3.16
3918.00	32.27	353.35	3790.93	31.00	513.85	513.81 N	15.73 W	514.05@	358.25	2.47
3949.00	31.22	355.29	3817.30	31.00	530.14	530.04 N	17.35 W	530.32@	358.13	4.72
3981.00	30.42	356.52	3844.78	32.00	546.54	546.39 N	18.52 W	546.71@	358.06	3.18
4012.00	30.34	356.61	3871.52	31.00	562.21	562.04 N	19.46 W	562.38@	358.02	0.30
4044.00	30.25	354.76	3899.15	32.00	578.35	578.14 N	20.67 W	578.51@	357.95	2.93
4075.00	29.55	356.87	3926.03	31.00	593.80	593.55 N	21.81 W	593.95@	357.90	4.08
4107.00	29.28	357.84	3953.90	32.00	609.52	609.25 N	22.53 W	609.66@	357.88	1.71
4139.00	28.49	357.05	3981.92	32.00	624.97	624.69 N	23.22 W	625.12@	357.87	2.74
4170.00	27.70	355.46	4009.27	31.00	639.57	639.25 N	24.17 W	639.71@	357.83	3.51
4201.00	26.73	358.10	4036.84	31.00	653.74	653.41 N	24.97 W	653.88@	357.81	5.00
4232.00	26.29	356.34	4064.58	31.00	667.58	667.23 N	25.64 W	667.72@	357.80	2.90
4264.00	25.94	357.31	4093.31	32.00	681.66	681.29 N	26.42 W	681.80@	357.78	1.72
4295.00	25.15	359.59	4121.28	31.00	695.02	694.65 N	26.79 W	695.17@	357.79	4.08
4326.00	24.62	357.48	4149.40	31.00	708.06	707.69 N	27.12 W	708.21@	357.81	3.33
4358.00	24.36	357.22	4178.52	32.00	721.32	720.94 N	27.73 W	721.47@	357.80	0.89
4389.00	23.65	357.84	4206.84	31.00	733.93	733.54 N	28.27 W	734.08@	357.79	2.41
4421.00	22.86	358.10	4236.24	32.00	746.56	746.17 N	28.72 W	746.72@	357.80	2.49
4452.00	22.16	358.01	4264.88	31.00	758.43	758.03 N	29.13 W	758.59@	357.80	2.27
4484.00	21.46	358.01	4294.59	32.00	770.31	769.91 N	29.54 W	770.47@	357.80	2.20
4515.00	21.19	357.75	4323.47	31.00	781.58	781.17 N	29.96 W	781.75@	357.80	0.91
4544.00	20.49	359.59	4350.57	29.00	791.89	791.49 N	30.20 W	792.06@	357.82	3.32
4575.00	20.22	358.36	4379.63	31.00	802.67	802.27 N	30.39 W	802.84@	357.83	1.62

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
MESCAL #2
Eddy COUNTY, New Mexico
RIG:Lariat # 31

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist (ft)	Dir (deg)	DLS (dg/100ft)
4607.00	19.43	359.42	4409.74	32.00	813.51	813.12 N	30.60 W	813.70@	357.84	2.71
4638.00	18.29	358.63	4439.07	31.00	823.53	823.14 N	30.77 W	823.71@	357.86	3.78
4670.00	17.24	357.40	4469.55	32.00	833.28	832.90 N	31.11 W	833.48@	357.86	3.50
4701.00	16.44	358.45	4499.22	31.00	842.26	841.87 N	31.43 W	842.46@	357.86	2.74
4733.00	15.83	358.10	4529.95	32.00	851.15	850.76 N	31.70 W	851.35@	357.87	1.95
4764.00	13.98	357.75	4559.91	31.00	859.12	858.73 N	31.99 W	859.32@	357.87	5.96
4796.00	12.40	358.45	4591.07	32.00	866.42	866.02 N	32.23 W	866.62@	357.87	4.97
4827.00	11.78	358.45	4621.38	31.00	872.91	872.52 N	32.41 W	873.12@	357.87	1.99
4859.00	10.46	356.69	4652.78	32.00	879.08	878.68 N	32.66 W	879.29@	357.87	4.26
4890.00	9.41	351.95	4683.31	31.00	884.42	884.00 N	33.18 W	884.62@	357.85	4.31
4922.00	8.71	350.01	4714.91	32.00	889.44	888.98 N	33.97 W	889.63@	357.81	2.40
4953.00	7.74	351.95	4745.59	31.00	893.85	893.35 N	34.67 W	894.03@	357.78	3.24
4984.00	7.39	354.23	4776.32	31.00	897.92	897.40 N	35.16 W	898.09@	357.76	1.49
5016.00	6.07	357.57	4808.10	32.00	901.66	901.14 N	35.44 W	901.84@	357.75	4.30
5047.00	5.36	354.67	4838.95	31.00	904.75	904.22 N	35.64 W	904.92@	357.74	2.45
5079.00	4.57	342.54	4870.83	32.00	907.48	906.93 N	36.16 W	907.65@	357.72	4.10
5111.00	4.40	334.72	4902.73	32.00	909.86	909.25 N	37.07 W	910.01@	357.67	1.99
5142.00	4.31	327.69	4933.64	31.00	911.98	911.31 N	38.20 W	912.11@	357.60	1.74
5173.00	4.13	311.52	4964.56	31.00	913.79	913.03 N	39.66 W	913.90@	357.51	3.87
5205.00	3.96	297.28	4996.48	32.00	915.16	914.31 N	41.50 W	915.25@	357.40	3.18
5236.00	3.87	288.23	5027.41	31.00	916.09	915.12 N	43.45 W	916.15@	357.28	2.01
5267.00	3.69	281.02	5058.34	31.00	916.73	915.64 N	45.42 W	916.77@	357.16	1.63
5299.00	3.69	270.47	5090.27	32.00	917.05	915.85 N	47.46 W	917.08@	357.03	2.12
5330.00	3.78	259.31	5121.21	31.00	916.99	915.66 N	49.47 W	917.00@	356.91	2.36
5362.00	3.69	241.56	5153.14	32.00	916.42	914.98 N	51.41 W	916.42@	356.78	3.61
5393.00	3.34	225.47	5184.08	31.00	915.40	913.87 N	52.93 W	915.40@	356.69	3.37
5425.00	3.08	218.35	5216.03	32.00	914.15	912.54 N	54.13 W	914.15@	356.61	1.49

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
MESCAL #2
Eddy COUNTY, New Mexico
RIG:Lariat # 31

Page 06/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
5456.00	3.17	204.38	5246.99	31.00	912.77	911.11 N	55.00 W	912.77@	356.55	2.46
5488.00	2.99	192.60	5278.94	32.00	911.18	909.49 N	55.54 W	911.18@	356.51	2.05
5519.00	2.46	181.18	5309.91	31.00	909.74	908.04 N	55.73 W	909.74@	356.49	2.44
5551.00	1.93	187.15	5341.88	32.00	908.53	906.81 N	55.82 W	908.53@	356.48	1.80
5582.00	2.55	189.79	5372.86	31.00	907.34	905.61 N	56.00 W	907.34@	356.46	2.01
5613.00	3.25	197.00	5403.82	31.00	905.84	904.09 N	56.37 W	905.85@	356.43	2.55
5645.00	3.87	206.49	5435.76	32.00	904.06	902.26 N	57.12 W	904.06@	356.38	2.66
5676.00	4.04	209.39	5466.69	31.00	902.23	900.37 N	58.12 W	902.24@	356.31	0.86
5708.00	3.52	204.99	5498.62	32.00	900.42	898.50 N	59.09 W	900.44@	356.24	1.88
5739.00	3.52	203.24	5529.56	31.00	898.73	896.76 N	59.87 W	898.76@	356.18	0.35
5770.00	3.08	202.45	5560.51	31.00	897.13	895.12 N	60.56 W	897.16@	356.13	1.43
5807.00	2.73	198.40	5597.46	37.00	895.42	893.36 N	61.22 W	895.46@	356.08	1.10
5838.00	2.11	198.58	5628.43	31.00	894.20	892.12 N	61.63 W	894.25@	356.05	1.99
5870.00	1.85	199.19	5660.41	32.00	893.18	891.08 N	61.99 W	893.23@	356.02	0.83
5901.00	1.57	204.91	5691.40	31.00	892.35	890.22 N	62.33 W	892.40@	355.99	1.05
5932.00	1.57	207.89	5722.39	31.00	891.61	889.46 N	62.71 W	891.67@	355.97	0.26
5964.00	1.57	209.65	5754.37	32.00	890.87	888.69 N	63.13 W	890.93@	355.94	0.15
Straight line projection to bit.										
6007.00	1.57	209.65	5797.36	43.00	889.88	887.67 N	63.72 W	889.95@	355.89	0.00

** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.

FINDER

ENERGY SERVICES

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	Yates Petroleum		
LEASE / WELL No.:	Mescal	# 2	
WELL LOCATION:	Eddy County		
COUNTY / STATE / COUNTRY:	Eddy	New Mexico	USA
RIG:	Lariat # 31		
API WELL No.			
JOB No:	101006447 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	Pathfinder Energy		

WELL SITE INFORMATION

MAGNETIC DECLINATION:			
On Wall Plat.	8 83	LWD Calculated	8 822231
		Agreed Upon:	8 822231
X =	372715.000000	Feet	Y = 535452.500000 Feet
SITE LATITUDE:	32.471394 N	SITE LONGITUDE:	104.746061 W
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	New Mexico East
PROPOSED DRIFT DIRECTION:	356.63		
KELLY BUSHING ELEVATION:	19.5		
ALTITUDE:	4515	Feet	WATER DEPTH: 0 Feet

TIE-IN SURVEY

MEASURED DEPTH:	2056		
DRIFT ANGLE:	0 94		
DRIFT DIRECTION:	227.12		
TRUE VERTICAL DEPTH:	2055.4		
VERTICAL SECTION:	-41.06		
RECTANGULAR COORDINATE (N / S)	-41 93		
RECTANGULAR COORDINATE (E / W)	-13.55		
CLOSURE DISTANCE / DIRECTION:	44.07	197.91	
SURVEY CALCULATION METHOD	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY)	Gyrodata		
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO		

WELL PLAN

KICKOFF DEPTH:	2110	TOTAL DEPTH:	8698
KICKOFF ANGLE:	0	MAX ANGLE:	28.17

PES Engineers:

John "Peg" Jettison

**Signature of both field engineers required if applicable

Directional Driller:

J. J. Keel

DATE:

3/29/07

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

Thu May 24 08:18:03 2007

Coordinates

Latitude:	32.471394 N (32 deg. 28 min. 17.0187 sec.)
Longitude:	104.746061 W (-104 deg. 44 min. 45.8199 sec.)
Elevation:	4515.00 feet.
Calculation Date:	May/24/2007

Magnetic Calculations

Model:	IGRF2005
Dip Angle:	60.3098 degrees
Total Magnetic Field:	0.49045 gauss
Magnetic Declination:	8.600644 degrees
Horizontal Intensity:	0.242924 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.600644 Degs

Transverse Mercator Grid Calculations NAD27

Grid System:	Transverse Mercator: new mexico east
Ellipsoid:	Clarke 1866
X:	372715.0000 feet
Y:	535452.5000 feet
True to Grid: (convergence)	0.221587 degrees
Magnetic to Grid:	8.822231 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 8.822231 Degs.

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Revised Oct 12, 2005
Submit to Appropriate District
State License # 4000
Fee License # 1000

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Month - Year
MAR 28 2007
OCD - ARTESIA, NM

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Well Name
Property Code	Property Name	Well Number
OGRID No. 025575	Operator Name	Elevation
	MESCAL "SE" FEDERAL	2
	YATES PETROLEUM CORPORATION	4515

Surface Location

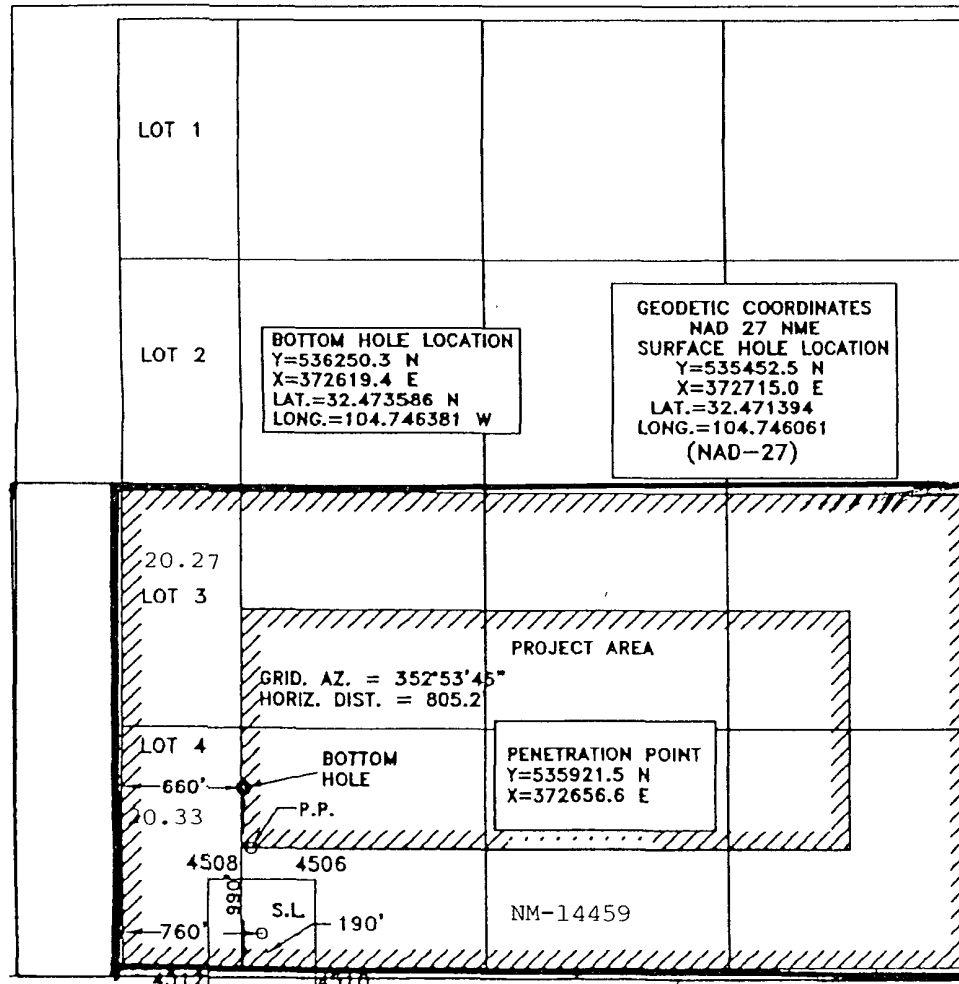
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	21S	22E		190	SOUTH	760	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	21S	22E		990	SOUTH	660	WEST	EDDY

Dedicated Acres 280.60 S/2	Joint or Infill	Consolidation Code	Order No.
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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



OPERATOR CERTIFICATION

I hereby certify that 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 unleased mineral interest in the land including the proposed bottom hole 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.

Debbie L. Caffall 03/27/2007
Signature Date

Debbie L. Caffall
Printed Name

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.

12/12/2006

Date Surveyed
Signature & Seal of Professional Surveyor

Herschell L. Jones
HERSCHELL L. JONES
NEW MEXICO
3640
Certified by me, Herschell L. Jones 3640
GENERAL SURVEYOR