

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 87240
District II
1301 W. Grand Ave., 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

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

Form C-103
May 27, 2004

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-005-63918
1. Type of Well: Oil Well ☐ Gas Well ☒ Other		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator PARALLEL PETROLEUM CORPORATION		6. State Oil & Gas Lease No.
3. Address of Operator 1004 N BIG SPRING, SUITE 400, MIDLAND, TX 79701		7. Lease Name or Unit Agreement Name: GRINDSTONE 1525-5
4. Well Location Unit Letter I : 1880 feet from the SOUTH line and 208 feet from the EAST line Section 5 Township 15S Range 25E NMPM County CHAVES		8. Well Number 1
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR: 3546		9. OGRID Number 230387
Pit or Below-grade Tank Application ☐ or Closure ☐ Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		10. Pool name or Wildcat WALNUT CREEK WOLF CAMP GAS

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☒

OTHER: **TD, PROD CSG, SURVEYS, MUD LOG** ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

06-03-2008: TD @ 8838

06-05-2008: RAN 5.5 CSG, 7.875 HOLE, 17# SET @ 8822

OMT: LEAD W/450 SX HALLIBURTON INTERFILL C-SEM + 1/4 # POLY-E-FLAKE, 11.9 PPG, 2.47 YLD

TAIL W/500 SX HALLIBURTON ACID SOLUBLE + 10# SILICALITE 50/50 POZ + 0.7% HR, 15.02 PPG,
2.62 YLD, 117 CENTRALIZERS

TOC: CIRCULATED 33SX TO SURFACE

WOC: 8 HOURS, TEST CSG TO 1500 PSI FOR 30 MINUTES

PATHFINDER MWD SURVEY, GYRODATA GYRO SURVEY, MUD LOG ATTACHED

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or placed according to NMOC guidelines ☐ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Kaye McCormick TITLE SR PROD & REG TECH DATE 07-07-2008

Type or print name **KAYE MC CORMICK**

E-mail address: **kmccormick@plll.com**

Telephone No. **432-685-6563**

For State Use Only

APPROVED BY _____ TITLE _____ DATE _____

Conditions of Approval, if any:

Accepted for record - NMOC

DIRECTIONAL SURVEY REPORT

PARALLEL PETROLEUM
GRINDSTONE 1525-5 #1
CHAVES COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

PathFinder Energy Services, Inc.

Survey Report

PARALLEL PETROLEUM
GRINDSTONE 1525-5 #1
CHAVES COUNTY, NEW MEXICO
Rig: PATRIOT 1
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: CHUCK HARPER

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 33.231.9979 N LON: 104.27.24.2428 W
Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 462185.4000 Y: 742895.9000
North Aligned To: GRID NORTH
Total Magnetic Correction: 8.48° EAST TO GRID
Vertical Section Plane: 270.46
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude: 3546.00' Ground To MSL

Survey Calculations by RX4 using Minimum Curvature

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)
TIE-IN PROVIDED BY GYRODATA DIRECTIONAL SURVEY @ 4200' MD.										
4200.00	2.10	77.91	4198.17	0.00	15.92	44.95 S	16.28 W	47.81@	199.91	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
4229.00	0.18	317.06	4227.16	29.00	15.43	44.81 S	15.79 W	47.51@	199.41	7.58
4260.00	3.34	262.42	4258.15	31.00	16.36	44.89 S	16.72 W	47.90@	200.43	10.45
4292.00	6.77	260.56	4290.02	32.00	19.14	45.32 S	19.51 W	49.34@	203.29	10.73
4324.00	10.20	259.85	4321.66	32.00	23.79	46.13 S	24.16 W	52.07@	207.64	10.72
4355.00	13.63	262.33	4351.99	31.00	30.10	47.10 S	30.48 W	56.10@	212.91	11.19
4387.00	17.24	263.75	4382.83	32.00	38.55	48.12 S	38.93 W	61.90@	218.98	11.34
4419.00	20.75	263.58	4413.08	32.00	48.89	49.27 S	49.28 W	69.69@	225.01	10.97
4450.00	24.09	263.43	4441.74	31.00	60.62	50.61 S	61.03 W	79.28@	230.33	10.78
4482.00	27.96	263.02	4470.49	32.00	74.55	52.27 S	74.97 W	91.39@	235.11	12.11
4514.00	32.10	262.73	4498.18	32.00	90.42	54.26 S	90.86 W	105.82@	239.15	12.95
4545.00	36.49	262.53	4523.79	31.00	107.72	56.50 S	108.17 W	122.04@	242.42	14.17
4577.00	40.36	263.13	4548.85	32.00	127.42	58.98 S	127.90 W	140.85@	245.25	12.15
4609.00	44.32	265.20	4572.50	32.00	148.84	61.15 S	149.34 W	161.37@	247.73	13.12
4640.00	48.28	267.33	4593.92	31.00	171.19	62.60 S	171.70 W	182.75@	249.97	13.71
4672.00	52.23	267.58	4614.37	32.00	195.75	63.69 S	196.27 W	206.35@	252.02	12.36
4704.00	56.28	267.98	4633.06	32.00	221.69	64.69 S	222.22 W	231.44@	253.77	12.70
4736.00	60.32	269.36	4649.87	32.00	248.90	65.32 S	249.43 W	257.84@	255.33	13.15
4767.00	64.72	269.24	4664.18	31.00	276.39	65.65 S	276.93 W	284.60@	256.66	14.20
4799.00	68.68	269.77	4676.83	32.00	305.77	65.91 S	306.31 W	313.32@	257.86	12.47
4831.00	72.81	270.74	4687.38	32.00	335.97	65.77 S	336.51 W	342.88@	258.94	13.22
4863.00	76.59	271.97	4695.82	32.00	366.83	65.04 S	367.36 W	373.07@	259.96	12.38

PathFinder Energy Services, Inc.

Survey Report

PARALLEL PETROLEUM
GRINDSTONE 1525-5 #1
CHAVES COUNTY, NEW MEXICO
RIG:PATRIOT 1

Page 02/03

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)
4895.00	80.37	273.21	4702.21	32.00	398.16	63.62 S	398.68 W	403.72@	260.93	12.41
4914.00	82.92	273.93	4704.97	19.00	416.92	62.45 S	417.44 W	422.08@	261.49	13.93
4927.00	84.94	274.78	4706.35	13.00	429.82	61.46 S	430.33 W	434.70@	261.87	16.84
4959.00	89.08	273.70	4708.02	32.00	461.70	59.10 S	462.19 W	465.95@	262.71	13.37
4990.00	90.40	272.98	4708.16	31.00	492.66	57.30 S	493.14 W	496.45@	263.37	4.85
5083.00	89.52	272.53	4708.22	93.00	585.58	52.83 S	586.03 W	588.40@	264.85	1.06
5176.00	90.04	272.50	4708.58	93.00	678.52	48.75 S	678.94 W	680.68@	265.89	0.56
5268.00	90.31	273.50	4708.30	92.00	770.43	43.93 S	770.81 W	772.06@	266.74	1.13
5361.00	89.96	272.29	4708.08	93.00	863.35	39.23 S	863.69 W	864.58@	267.40	1.36
5454.00	90.57	272.93	4707.65	93.00	956.28	35.00 S	956.59 W	957.23@	267.90	0.95
5546.00	90.22	270.92	4707.02	92.00	1048.24	31.91 S	1048.53 W	1049.02@	268.26	2.22
5639.00	92.07	272.15	4705.16	93.00	1141.20	29.42 S	1141.47 W	1141.85@	268.52	2.39
5732.00	93.39	271.68	4700.73	93.00	1234.06	26.31 S	1234.31 W	1234.59@	268.78	1.51
5824.00	91.01	270.91	4697.20	92.00	1325.98	24.24 S	1326.21 W	1326.44@	268.95	2.72
5917.00	90.84	273.11	4695.70	93.00	1418.93	20.98 S	1419.14 W	1419.29@	269.15	2.37
6013.00	91.45	273.05	4693.78	96.00	1514.81	15.82 S	1514.98 W	1515.06@	269.40	0.64
6108.00	91.01	272.26	4691.74	95.00	1609.71	11.42 S	1609.86 W	1609.90@	269.59	0.95
6204.00	89.69	271.44	4691.15	96.00	1705.68	8.32 S	1705.80 W	1705.82@	269.72	1.62
6299.00	89.69	270.51	4691.67	95.00	1800.67	6.70 S	1800.79 W	1800.80@	269.79	0.98
6394.00	91.80	272.21	4690.43	95.00	1895.65	4.45 S	1895.74 W	1895.75@	269.87	2.85
6490.00	90.75	272.00	4688.29	96.00	1991.58	0.93 S	1991.65 W	1991.65@	269.97	1.12
6585.00	89.69	271.34	4687.93	95.00	2086.56	1.84 N	2086.61 W	2086.61@	270.05	1.32
6681.00	91.10	272.91	4687.27	96.00	2182.51	5.40 N	2182.54 W	2182.54@	270.14	2.20
6776.00	89.87	272.45	4686.46	95.00	2277.43	9.84 N	2277.43 W	2277.45@	270.25	1.38
6872.00	90.22	272.75	4686.39	96.00	2373.36	14.20 N	2373.33 W	2373.37@	270.34	0.48
6967.00	90.57	272.37	4685.73	95.00	2468.30	18.44 N	2468.23 W	2468.30@	270.43	0.54
7062.00	91.54	272.79	4683.98	95.00	2563.22	22.72 N	2563.12 W	2563.22@	270.51	1.11

PathFinder Energy Services, Inc.

Survey Report

PARALLEL PETROLEUM
GRINDSTONE 1525-5 #1
CHAVES COUNTY, NEW MEXICO
RIG: PATRIOT 1

Page 03/03

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)
7158.00	90.48	270.87	4682.29	96.00	2659.17	25.78 N	2659.05 W	2659.17@	270.56	2.28
7253.00	90.48	270.03	4681.50	95.00	2754.16	26.53 N	2754.04 W	2754.17@	270.55	0.88
7348.00	91.10	270.59	4680.19	95.00	2849.15	27.04 N	2849.03 W	2849.16@	270.54	0.88
7443.00	90.92	269.96	4678.51	95.00	2944.14	27.50 N	2944.01 W	2944.14@	270.54	0.69
7539.00	89.87	269.63	4677.85	96.00	3040.13	27.15 N	3040.01 W	3040.13@	270.51	1.15
7634.00	91.89	269.44	4676.39	95.00	3135.10	26.38 N	3134.99 W	3135.10@	270.48	2.14
7729.00	91.45	270.34	4673.62	95.00	3230.05	26.20 N	3229.95 W	3230.05@	270.46	1.05
7825.00	91.19	270.65	4671.41	96.00	3326.03	27.03 N	3325.92 W	3326.03@	270.47	0.42
7920.00	93.56	270.95	4667.47	95.00	3420.94	28.36 N	3420.82 W	3420.94@	270.47	2.51
8016.00	93.12	270.81	4661.88	96.00	3516.77	29.83 N	3516.64 W	3516.77@	270.49	0.48
8111.00	93.83	270.44	4656.12	95.00	3611.59	30.86 N	3611.46 W	3611.59@	270.49	0.84
8206.00	93.30	270.27	4650.22	95.00	3706.41	31.45 N	3706.28 W	3706.41@	270.49	0.59
8302.00	89.43	270.11	4647.93	96.00	3802.36	31.77 N	3802.23 W	3802.36@	270.48	4.03
8397.00	90.04	269.48	4648.37	95.00	3897.35	31.43 N	3897.23 W	3897.35@	270.46	0.92
8492.00	91.80	269.00	4646.84	95.00	3992.32	30.17 N	3992.20 W	3992.32@	270.43	1.92
8588.00	90.48	268.62	4644.93	96.00	4088.26	28.17 N	4088.16 W	4088.26@	270.39	1.43
8683.00	90.84	267.70	4643.84	95.00	4183.17	25.12 N	4183.11 W	4183.18@	270.34	1.04
8768.00	91.28	267.05	4642.27	85.00	4268.03	21.23 N	4268.00 W	4268.05@	270.29	0.92
STRAIGHT LINE PROJECTION TO BIT @ 8838'MD.										
8838.00	91.28	267.05	4640.70	70.00	4337.89	17.63 N	4337.89 W	4337.93@	270.23	0.00

A Gyrodata Directional Survey

Field Copy Only, not definitive

for

PARALLEL PETROLEUM

Location: PATRIOT RIG 1, CHAVES COUNTY, NEW MEXICO

Lease: GRINDSTONE 1525-5 Well: #1, 4-1/2 DRILLPIPE

Job Number: MD0508GW238

Run Date: 5/26/2008 6:18:09 AM

Surveyor: JAMES KING
JUNIOR PENA

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 33.042000 deg. N Longitude: 104.457220 deg. W

Azimuth Correction:

Gyro: 0.07000 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

PARALLEL PETROLEUM

Location: PATRIOT RIG 1, CHAVES COUNTY, NEW MEXICO

Lease: GRINDSTONE 1525-5 Well: #1, 4-1/2 DRILLPIPE

Job Number: MD0508GW238

MEASURED DEPTH feet	I N C L 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 - 4674.33 FT RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2 DRILLPIPE ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO PATRIOT RIG 1 RKB (+13FT)							
100.00	0.85	196.57	-0.7	0.85	100.00	0.7 196.6	0.71 S 0.21 W
150.00	1.27	208.72	-1.6	0.94	149.99	1.7 200.6	1.55 S 0.58 W
200.00	1.16	205.67	-2.5	0.26	199.98	2.7 203.2	2.49 S 1.07 W
250.00	1.25	211.13	-3.4	0.29	249.97	3.8 204.7	3.41 S 1.57 W
300.00	1.66	199.83	-4.6	1.00	299.95	5.0 204.7	4.56 S 2.10 W
350.00	2.09	190.72	-6.1	1.05	349.92	6.6 202.2	6.14 S 2.51 W
400.00	2.33	188.92	-8.0	0.51	399.89	8.5 199.4	8.04 S 2.84 W
450.00	2.54	187.08	-10.2	0.43	449.84	10.6 197.2	10.15 S 3.13 W
500.00	2.72	187.20	-12.4	0.37	499.79	12.9 195.4	12.42 S 3.42 W
550.00	2.80	187.79	-14.8	0.17	549.73	15.3 194.1	14.81 S 3.73 W
600.00	2.79	187.99	-17.2	0.04	599.67	17.7 193.3	17.23 S 4.07 W
650.00	2.72	185.80	-19.6	0.25	649.61	20.1 192.5	19.61 S 4.36 W
700.00	2.76	184.31	-22.0	0.17	699.56	22.5 191.7	21.99 S 4.57 W
750.00	2.80	184.58	-24.4	0.08	749.50	24.9 191.0	24.41 S 4.75 W
800.00	2.70	189.62	-26.8	0.52	799.44	27.3 190.7	26.79 S 5.05 W
850.00	2.66	195.25	-29.1	0.53	849.38	29.6 190.8	29.07 S 5.55 W
900.00	2.59	206.54	-31.2	1.04	899.33	31.8 191.5	31.20 S 6.36 W
950.00	2.71	210.72	-33.2	0.45	949.28	34.1 192.7	33.23 S 7.47 W
1000.00	2.72	209.74	-35.3	0.09	999.22	36.3 193.8	35.28 S 8.66 W
1050.00	2.66	210.38	-37.3	0.14	1049.17	38.6 194.8	37.31 S 9.84 W

A Gyrodata Directional Survey

PARALLEL PETROLEUM

Location: PATRIOT RIG 1, CHAVES COUNTY, NEW MEXICO

Lease: GRINDSTONE 1525-5 Well: #1, 4-1/2 DRILLPIPE

Job Number: MD0508GW238

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
1100.00	2.65	211.39	-39.3	0.09	1099.11	40.8 195.7	39.29 S 11.03 W
1150.00	2.62	214.59	-41.2	0.30	1149.06	43.0 196.6	41.22 S 12.28 W
1200.00	2.69	215.76	-43.1	0.18	1199.01	45.2 197.5	43.11 S 13.61 W
1250.00	2.76	217.35	-45.0	0.21	1248.95	47.5 198.5	45.02 S 15.03 W
1300.00	2.77	216.40	-47.0	0.09	1298.89	49.8 199.3	46.95 S 16.47 W
1350.00	2.66	219.92	-48.8	0.40	1348.84	52.0 200.2	48.81 S 17.94 W
1400.00	2.50	221.63	-50.5	0.36	1398.79	54.1 201.0	50.52 S 19.41 W
1450.00	2.44	218.52	-52.2	0.30	1448.74	56.2 201.7	52.17 S 20.79 W
1500.00	2.38	219.65	-53.8	0.15	1498.69	58.2 202.3	53.80 S 22.12 W
1550.00	2.12	218.28	-55.3	0.52	1548.66	60.0 202.9	55.32 S 23.35 W
1600.00	1.97	224.62	-56.7	0.55	1598.62	61.7 203.4	56.66 S 24.53 W
1650.00	1.73	224.34	-57.8	0.48	1648.60	63.2 203.9	57.81 S 25.66 W
1700.00	1.71	220.60	-58.9	0.23	1698.58	64.7 204.4	58.92 S 26.67 W
1750.00	1.39	228.78	-59.9	0.77	1748.56	65.9 204.8	59.88 S 27.61 W
1800.00	1.01	232.32	-60.5	0.77	1798.55	66.9 205.1	60.55 S 28.42 W
1850.00	1.16	235.68	-61.1	0.32	1848.54	67.7 205.5	61.11 S 29.19 W
1900.00	1.15	227.77	-61.7	0.32	1898.53	68.6 205.9	61.73 S 29.98 W
1950.00	1.02	253.28	-62.2	0.99	1948.52	69.4 206.3	62.19 S 30.77 W
2000.00	0.62	283.00	-62.3	1.14	1998.51	69.8 206.8	62.26 S 31.47 W
2050.00	0.59	313.82	-62.0	0.65	2048.51	69.8 207.2	62.02 S 31.92 W
2100.00	0.59	2.20	-61.6	0.96	2098.51	69.4 207.5	61.59 S 32.09 W
2150.00	0.56	355.45	-61.1	0.14	2148.51	69.0 207.7	61.09 S 32.10 W
2200.00	0.64	344.25	-60.6	0.28	2198.50	68.6 208.0	60.58 S 32.20 W
2250.00	0.55	357.32	-60.1	0.32	2248.50	68.2 208.3	60.07 S 32.28 W

A Gyrodata Directional Survey

PARALLEL PETROLEUM

Location: PATRIOT RIG 1, CHAVES COUNTY, NEW MEXICO

Lease: GRINDSTONE 1525-5 Well: #1, 4-1/2 DRILLPIPE

Job Number: MD0508GW238

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2300.00	0.39	341.89	-59.7	0.41	2298.50	67.9 208.5	59.67 S 32.35 W
2350.00	0.49	343.27	-59.3	0.21	2348.50	67.6 208.7	59.30 S 32.46 W
2400.00	0.50	335.27	-58.9	0.14	2398.50	67.3 209.0	58.89 S 32.62 W
2450.00	0.54	332.26	-58.5	0.11	2448.49	67.1 209.3	58.49 S 32.82 W
2500.00	0.51	343.06	-58.1	0.21	2498.49	66.8 209.6	58.06 S 32.99 W
2550.00	0.44	337.03	-57.7	0.16	2548.49	66.5 209.9	57.67 S 33.13 W
2600.00	0.30	336.35	-57.4	0.28	2598.49	66.3 210.1	57.38 S 33.26 W
2650.00	0.43	352.29	-57.1	0.33	2648.49	66.1 210.3	57.07 S 33.34 W
2700.00	0.42	346.12	-56.7	0.10	2698.49	65.8 210.5	56.70 S 33.41 W
2750.00	0.48	355.22	-56.3	0.19	2748.48	65.5 210.7	56.32 S 33.47 W
2800.00	0.48	349.06	-55.9	0.10	2798.48	65.2 211.0	55.90 S 33.53 W
2850.00	0.53	354.44	-55.5	0.13	2848.48	64.8 211.2	55.46 S 33.59 W
2900.00	0.50	353.79	-55.0	0.06	2898.48	64.5 211.4	55.02 S 33.63 W
2950.00	0.46	358.55	-54.6	0.11	2948.48	64.1 211.7	54.60 S 33.66 W
3000.00	0.56	355.40	-54.2	0.20	2998.48	63.8 211.9	54.16 S 33.69 W
3050.00	0.55	356.05	-53.7	0.02	3048.47	63.4 212.1	53.68 S 33.72 W
3100.00	0.58	333.93	-53.2	0.44	3098.47	63.1 212.5	53.21 S 33.85 W
3150.00	0.50	338.09	-52.8	0.18	3148.47	62.8 212.8	52.78 S 34.04 W
3200.00	0.48	349.83	-52.4	0.21	3198.47	62.5 213.1	52.37 S 34.16 W
3250.00	0.49	352.70	-52.0	0.06	3248.46	62.2 213.4	51.96 S 34.23 W
3300.00	0.44	5.35	-51.5	0.23	3298.46	61.9 213.6	51.55 S 34.24 W
3350.00	0.45	1.25	-51.2	0.07	3348.46	61.6 213.8	51.17 S 34.21 W
3400.00	0.50	3.29	-50.8	0.10	3398.46	61.2 214.0	50.75 S 34.20 W
3450.00	0.52	11.69	-50.3	0.15	3448.46	60.8 214.2	50.31 S 34.14 W

A Gyrodata Directional Survey

PARALLEL PETROLEUM

Location: PATRIOT RIG 1, CHAVES COUNTY, NEW MEXICO

Lease: GRINDSTONE 1525-5 Well: #1, 4-1/2 DRILLPIPE

Job Number: MD0508GW238

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
3500.00	0.79	28.67	-49.8	0.67	3498.45	60.2 214.3	49.79 S 33.93 W
3550.00	0.68	39.02	-49.3	0.34	3548.45	59.6 214.3	49.25 S 33.57 W
3600.00	0.89	56.15	-48.8	0.62	3598.45	59.0 214.1	48.81 S 33.07 W
3650.00	0.85	64.46	-48.4	0.26	3648.44	58.3 213.8	48.43 S 32.41 W
3700.00	0.94	67.04	-48.1	0.21	3698.43	57.6 213.4	48.11 S 31.70 W
3750.00	1.02	69.89	-47.8	0.18	3748.43	56.9 212.9	47.80 S 30.91 W
3800.00	1.29	70.18	-47.5	0.55	3798.42	56.1 212.3	47.46 S 29.96 W
3850.00	1.67	77.58	-47.1	0.84	3848.40	55.2 211.4	47.11 S 28.72 W
3900.00	2.21	84.62	-46.9	1.18	3898.37	54.1 210.0	46.86 S 27.05 W
3950.00	2.23	85.71	-46.7	0.10	3948.33	53.0 208.3	46.70 S 25.12 W
4000.00	2.34	79.82	-46.5	0.52	3998.29	51.9 206.5	46.45 S 23.14 W
4050.00	2.01	77.83	-46.1	0.69	4048.26	50.8 204.8	46.08 S 21.28 W
4100.00	1.77	79.58	-45.8	0.49	4098.23	49.8 203.3	45.76 S 19.67 W
4150.00	2.04	74.45	-45.4	0.64	4148.20	48.8 201.7	45.38 S 18.05 W
4200.00	2.10	77.91	-45.0	0.28	4198.17	47.8 199.9	44.95 S 16.30 W
4250.00	1.91	71.11	-44.5	0.61	4248.14	46.8 198.2	44.49 S 14.62 W
4300.00	2.02	64.54	-43.8	0.50	4298.11	45.7 196.6	43.84 S 13.03 W
4350.00	2.21	63.09	-43.0	0.40	4348.08	44.5 194.8	43.03 S 11.38 W
4400.00	2.21	63.76	-42.2	0.05	4398.04	43.3 192.9	42.16 S 9.66 W
4450.00	2.10	62.91	-41.3	0.22	4448.00	42.1 190.9	41.32 S 7.98 W
4500.00	2.16	61.47	-40.5	0.17	4497.97	40.9 188.9	40.45 S 6.33 W
4550.00	1.97	61.90	-39.6	0.39	4547.94	39.9 186.8	39.60 S 4.75 W
4600.00	2.11	58.02	-38.7	0.40	4597.91	38.8 184.7	38.70 S 3.21 W
4650.00	2.00	57.25	-37.7	0.23	4647.87	37.8 182.6	37.74 S 1.69 W

A Gyrodata Directional Survey

PARALLEL PETROLEUM

Location: PATRIOT RIG 1, CHAVES COUNTY, NEW MEXICO

Lease: GRINDSTONE 1525-5 Well: #1, 4-1/2 DRILLPIPE

Job Number: MD0508GW238

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4674.59	1.84	51.75	-37.3	0.99	4672.45	37.3 181.6	37.27 S 1.02 W

Final Station Closure: Distance: 37.28 ft Az: 181.57 deg.