

District I

1625 N. French Dr., Hobbs, NM 88240

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

May 27, 2004

WELL API NO.

30-007-20388

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

VPR D

8. Well Number 101

9. OGRID Number 180514

10. Pool name or Wildcat

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.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other COALBED METHANE

2. Name of Operator

EL PASO ENERGY RATON, L.L.C.

3. Address of Operator

PO BOX 190, RATON, NM 87740

4. Well Location

Unit Letter M : 300 feet from the South line and 1,062 feet from the West line

Section 2 Township 30N Range 17E NMPM Colfax County

Bottom Hole Location: Unit K, Sec 2, T 30N, R 17E, 2,590' FNL, 2590' FWL, Colfax

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

8,256' (GR)

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 _____

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 COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: Horizontal Lateral ☒

1. 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. Work proposed is as follows.

04/29/05 MIRU Key Rig. LD rods, tubing, and pump. Made a scraper run.

Set whipstock at 1,550'. Mill window from 1,537' - 1,543'.

05/10/05 MIRU CAZA Rig. Drill 4 3/4" horizontal lateral to 4,311'. 1,647' TVD.

To 05/16/05 (See attachment for surveys.)

05/17/05 Circulate and clean hole. Run 3 1/2" perforated liner. Top of liner at 1,573' Bottom of liner at 4,298'.

06/07/05 Fish out whip stock. Clean out well bore with air unit to PBTB at 1,953'.

TIH with 2 7/8" production tubing, rods, and insert pump.

6/09/05 Put well back on production.

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 closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE William M. Ordemann TITLE Production Engineer DATE 06/20/05
Type or print name William M. Ordemann E-mail address: bill.ordemann@elpaso.com Telephone No. (505) 445-6724

For State Use Only

APPROVED BY: [Signature] TITLE DISTRICT SUPERVISOR DATE 7/6/05
Conditions of Approval (if any):



Scientific Drilling Houston

Final Survey Report



Company: EL PASO PRODUCTION Date: 5/16/2005 Time: 09:47:46 Page: 1
Field: VERMEJO FIELD, NEW MEXICO Co-ordinate(NE) Reference: Well: WELL D-101, Grid North
Site: RATON (D101) Vertical (TVD) Reference: SITE 0.0
Well: WELL D-101 Section (VS) Reference: Well (0.00N,0.00E,33.61Azi)
Wellpath: LATERAL Survey Calculation Method: Minimum Curvature Db: Sybase

Field: VERMEJO FIELD, NEW MEXICO

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: igr2005

Site: RATON (D101)

Site Position: Northing: 2130292.9326 ft Latitude: 36 51 7.140 N
From: Geographic Easting: 272520.5352 ft Longitude: 105 6 38.976 W
Position Uncertainty: 0.0 ft North Reference: Grid
Ground Level: 8256.0 ft Grid Convergence: -0.47 deg

Well: WELL D-101

Slot Name:

Well Position: +N/-S 0.0 ft Northing: 2130292.9326 ft Latitude: 36 51 7.140 N
+E/-W 0.0 ft Easting: 272520.5352 ft Longitude: 105 6 38.976 W
Position Uncertainty: 0.0 ft

Wellpath: LATERAL

Drilled From: Surface
Tie-on Depth: 0.0 ft
Above System Datum: Mean Sea Level
Declination: 9.47 deg
Mag Dip Angle: 64.22 deg
Direction deg

Current Datum: SITE Height 0.0 ft
Magnetic Data: 4/20/2005
Field Strength: 51830 nT
Vertical Section: Depth From (TVD) +N/-S
ft ft

0.0 0.0 0.0 33.61

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	ClsD ft	ClsA deg	Tool
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.00	TIE LINE
100.0	1.13	53.17	100.0	0.6	0.8	0.9	1.13	1.0	53.17	SDI GYRO
200.0	2.33	29.97	199.9	2.9	2.6	3.9	1.37	3.9	41.39	SDI GYRO
300.0	3.22	8.65	299.8	7.5	4.0	8.5	1.35	8.5	28.32	SDI GYRO
400.0	3.42	5.22	399.7	13.2	4.7	13.6	0.28	14.0	19.66	SDI GYRO
500.0	2.93	8.87	499.5	18.7	5.4	18.6	0.53	19.5	16.06	SDI GYRO
600.0	2.40	15.85	599.4	23.3	6.4	22.9	0.62	24.1	15.28	SDI GYRO
700.0	2.17	10.59	699.3	27.1	7.3	26.6	0.31	28.1	15.01	SDI GYRO
800.0	2.10	18.16	799.3	30.7	8.2	30.1	0.29	31.8	14.93	SDI GYRO
900.0	1.76	13.12	899.2	34.0	9.1	33.3	0.38	35.2	15.02	SDI GYRO
1000.0	1.45	13.71	999.2	36.7	9.8	36.0	0.31	38.0	14.90	SDI GYRO
1100.0	1.89	23.42	1099.1	39.4	10.7	38.8	0.52	40.9	15.20	SDI GYRO
1200.0	1.62	23.99	1199.1	42.2	11.9	41.8	0.27	43.9	15.79	SDI GYRO
1300.0	1.67	32.05	1299.0	44.8	13.3	44.7	0.24	46.7	16.54	SDI GYRO
1400.0	1.58	22.79	1399.0	47.3	14.6	47.5	0.28	49.5	17.17	SDI GYRO
1500.0	1.49	24.24	1499.0	49.7	15.7	50.1	0.10	52.1	17.49	SDI GYRO
1553.0	8.79	36.52	1551.7	53.6	18.4	54.8	13.85	56.7	18.91	SDI E-FIELD
1585.0	22.63	36.52	1582.4	60.6	23.5	63.5	43.25	65.0	21.22	SDI E-FIELD
1617.0	34.67	39.33	1610.5	72.6	33.0	78.7	37.85	79.7	24.43	SDI E-FIELD
1647.0	46.68	28.59	1633.2	88.9	43.7	98.2	46.22	99.0	26.17	SDI E-FIELD
1675.0	55.78	37.11	1650.7	107.1	55.6	120.0	40.19	120.7	27.42	SDI E-FIELD
1707.0	62.91	37.05	1667.0	129.0	72.1	147.4	22.28	147.8	29.21	SDI E-FIELD
1739.0	69.68	37.20	1679.9	152.4	89.8	176.6	21.16	176.9	30.51	SDI E-FIELD
1770.0	76.50	37.17	1688.9	176.0	107.7	206.2	22.00	206.4	31.47	SDI E-FIELD
1801.0	82.49	35.89	1694.6	200.5	125.9	236.6	19.74	236.7	32.12	SDI E-FIELD
1832.0	83.60	36.10	1698.3	225.4	144.0	267.4	3.64	267.4	32.57	SDI E-FIELD
1863.0	88.65	35.63	1700.4	250.4	162.1	298.3	16.36	298.3	32.91	SDI E-FIELD
1895.0	89.06	34.35	1701.0	276.7	180.4	330.3	4.20	330.3	33.11	SDI E-FIELD



Scientific Drilling Houston

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Company: EL PASO PRODUCTION
Field: VERMEJO FIELD, NEW MEXICO
Site: RATON (D101)
Well: WELL D-101
Wellpath: LATERAL

Date: 5/16/2005 Time: 09:47:46 Page: 2
Co-ordinate(N/E) Reference: Well: WELL D-101, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,33.61Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	ClsD ft	ClsA deg	Tool
1926.0	88.92	34.35	1701.6	302.2	197.9	361.3	0.45	361.3	33.22	SDI E-FIELD
1957.0	88.32	34.02	1702.3	327.9	215.3	392.3	2.21	392.3	33.29	SDI E-FIELD
1988.0	87.58	33.45	1703.5	353.6	232.5	423.2	3.01	423.2	33.32	SDI E-FIELD
2020.0	89.40	33.88	1704.3	380.3	250.3	455.2	5.84	455.2	33.35	SDI E-FIELD
2051.0	91.65	33.53	1704.0	406.1	267.5	486.2	7.35	486.2	33.37	SDI E-FIELD
2082.0	91.82	33.87	1703.1	431.8	284.6	517.2	1.23	517.2	33.39	SDI E-FIELD
2113.0	91.58	33.63	1702.2	457.6	301.9	548.2	1.09	548.2	33.41	SDI E-FIELD
2144.0	91.28	32.68	1701.4	483.5	318.8	579.2	3.21	579.2	33.40	SDI E-FIELD
2176.0	90.64	32.85	1700.8	510.4	336.1	611.2	2.07	611.2	33.36	SDI E-FIELD
2207.0	90.94	33.17	1700.4	536.4	353.0	642.2	1.41	642.2	33.35	SDI E-FIELD
2239.0	91.34	34.24	1699.8	563.1	370.8	674.2	3.57	674.2	33.36	SDI E-FIELD
2271.0	91.55	34.04	1699.0	589.5	388.7	706.1	0.91	706.2	33.40	SDI E-FIELD
2302.0	89.53	32.90	1698.7	615.4	405.8	737.1	7.48	737.1	33.40	SDI E-FIELD
2334.0	87.55	33.58	1699.5	642.1	423.3	769.1	6.54	769.1	33.40	SDI E-FIELD
2366.0	88.05	33.97	1700.7	668.7	441.1	801.1	1.98	801.1	33.41	SDI E-FIELD
2397.0	88.49	34.56	1701.7	694.3	458.6	832.1	2.37	832.1	33.44	SDI E-FIELD
2429.0	89.06	35.13	1702.3	720.6	476.8	864.1	2.52	864.1	33.49	SDI E-FIELD
2460.0	91.45	35.74	1702.2	745.8	494.8	895.1	7.96	895.1	33.56	SDI E-FIELD
2491.0	93.77	34.52	1700.8	771.2	512.6	926.0	8.45	926.0	33.61	SDI E-FIELD
2522.0	93.90	36.35	1698.7	796.4	530.6	956.9	5.90	956.9	33.67	SDI E-FIELD
2554.0	93.36	36.66	1696.7	822.0	549.6	988.8	1.94	988.8	33.76	SDI E-FIELD
2586.0	92.46	36.09	1695.1	847.8	568.5	1020.7	3.33	1020.7	33.85	SDI E-FIELD
2617.0	91.35	35.02	1694.0	873.0	586.5	1051.7	4.97	1051.7	33.90	SDI E-FIELD
2648.0	92.29	34.36	1693.1	898.5	604.2	1082.7	3.70	1082.7	33.92	SDI E-FIELD
2680.0	92.89	34.27	1691.6	924.9	622.2	1114.6	1.90	1114.7	33.93	SDI E-FIELD
2711.0	90.00	33.73	1690.8	950.5	639.5	1145.6	9.48	1145.7	33.93	SDI E-FIELD
2743.0	88.96	33.59	1691.1	977.2	657.3	1177.6	3.28	1177.7	33.92	SDI E-FIELD
2774.0	91.11	33.94	1691.1	1002.9	674.5	1208.6	7.03	1208.6	33.92	SDI E-FIELD
2806.0	92.79	34.57	1690.0	1029.4	692.5	1240.6	5.61	1240.6	33.93	SDI E-FIELD
2837.0	93.33	33.57	1688.4	1055.0	709.8	1271.6	3.66	1271.6	33.93	SDI E-FIELD
2869.0	93.10	34.21	1686.6	1081.5	727.6	1303.5	2.12	1303.5	33.93	SDI E-FIELD
2900.0	92.96	34.46	1684.9	1107.1	745.1	1334.5	0.92	1334.5	33.94	SDI E-FIELD
2932.0	93.20	34.81	1683.2	1133.4	763.3	1366.4	1.32	1366.4	33.96	SDI E-FIELD
2963.0	93.57	35.66	1681.4	1158.7	781.1	1397.3	2.99	1397.4	33.99	SDI E-FIELD
2995.0	93.77	35.38	1679.3	1184.7	799.7	1429.3	1.07	1429.3	34.02	SDI E-FIELD
3026.0	93.33	33.85	1677.4	1210.1	817.2	1460.2	5.13	1460.2	34.03	SDI E-FIELD
3058.0	93.80	34.97	1675.4	1236.5	835.3	1492.1	3.79	1492.2	34.04	SDI E-FIELD
3089.0	92.52	34.44	1673.7	1261.9	852.9	1523.1	4.47	1523.1	34.05	SDI E-FIELD
3120.0	91.68	33.32	1672.6	1287.6	870.2	1554.1	4.51	1554.1	34.05	SDI E-FIELD
3152.0	91.11	33.80	1671.8	1314.3	887.9	1586.0	2.33	1586.1	34.04	SDI E-FIELD
3183.0	88.69	33.52	1671.8	1340.1	905.0	1617.0	7.86	1617.1	34.03	SDI E-FIELD
3214.0	89.19	33.20	1672.4	1366.0	922.1	1648.0	1.91	1648.1	34.02	SDI E-FIELD
3245.0	89.76	32.68	1672.7	1392.0	938.9	1679.0	2.49	1679.1	34.00	SDI E-FIELD
3276.0	90.64	31.67	1672.6	1418.2	955.5	1710.0	4.32	1710.1	33.97	SDI E-FIELD
3307.0	92.86	31.23	1671.6	1444.7	971.6	1741.0	7.30	1741.0	33.92	SDI E-FIELD
3338.0	95.09	31.63	1669.5	1471.1	987.7	1771.9	7.31	1771.9	33.88	SDI E-FIELD
3370.0	91.92	31.38	1667.5	1498.3	1004.4	1803.8	9.94	1803.8	33.84	SDI E-FIELD
3402.0	89.97	32.68	1667.0	1525.4	1021.4	1835.8	7.32	1835.8	33.81	SDI E-FIELD
3433.0	88.69	31.97	1667.4	1551.6	1038.0	1866.8	4.72	1866.8	33.78	SDI E-FIELD
3465.0	89.56	32.54	1667.9	1578.7	1055.1	1898.8	3.25	1898.8	33.76	SDI E-FIELD
3496.0	91.55	32.25	1667.6	1604.8	1071.7	1929.8	6.49	1929.8	33.73	SDI E-FIELD
3527.0	91.11	32.03	1666.8	1631.1	1088.1	1960.7	1.59	1960.7	33.71	SDI E-FIELD



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Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	ClsD ft	ClsA deg	Tool
3559.0	90.54	31.43	1666.4	1658.3	1105.0	1992.7	2.59	1992.7	33.68	SDI E-FIELD
3590.0	91.38	32.34	1665.9	1684.6	1121.3	2023.7	3.99	2023.7	33.65	SDI E-FIELD
3622.0	91.48	32.12	1665.1	1711.7	1138.4	2055.7	0.75	2055.7	33.63	SDI E-FIELD
3654.0	88.99	32.25	1664.9	1738.8	1155.5	2087.7	7.79	2087.7	33.61	SDI E-FIELD
3685.0	90.10	32.38	1665.2	1764.9	1172.0	2118.7	3.61	2118.7	33.59	SDI E-FIELD
3716.0	90.27	32.01	1665.1	1791.2	1188.5	2149.6	1.31	2149.6	33.57	SDI E-FIELD
3748.0	91.98	32.01	1664.5	1818.3	1205.5	2181.6	5.34	2181.6	33.54	SDI E-FIELD
3780.0	92.99	31.86	1663.1	1845.4	1222.4	2213.6	3.19	2213.6	33.52	SDI E-FIELD
3811.0	91.72	32.76	1661.8	1871.6	1239.0	2244.5	5.02	2244.5	33.50	SDI E-FIELD
3842.0	91.55	32.53	1660.9	1897.7	1255.7	2275.5	0.92	2275.5	33.49	SDI E-FIELD
3873.0	92.52	33.24	1659.8	1923.7	1272.5	2306.5	3.88	2306.5	33.48	SDI E-FIELD
3904.0	90.97	33.73	1658.9	1949.6	1289.6	2337.5	5.24	2337.5	33.48	SDI E-FIELD
3935.0	89.76	35.02	1658.7	1975.2	1307.1	2368.5	5.71	2368.5	33.50	SDI E-FIELD
3966.0	90.00	35.22	1658.7	2000.5	1324.9	2399.5	1.01	2399.5	33.52	SDI E-FIELD
3997.0	90.94	34.95	1658.5	2025.9	1342.7	2430.5	3.15	2430.5	33.54	SDI E-FIELD
4029.0	90.74	34.76	1658.0	2052.1	1361.0	2462.4	0.86	2462.4	33.55	SDI E-FIELD
4061.0	91.38	34.96	1657.4	2078.4	1379.3	2494.4	2.10	2494.4	33.57	SDI E-FIELD
4091.0	92.29	34.80	1656.5	2103.0	1396.5	2524.4	3.08	2524.4	33.59	SDI E-FIELD
4123.0	92.45	34.61	1655.1	2129.3	1414.7	2556.4	0.78	2556.4	33.60	SDI E-FIELD
4155.0	94.51	33.92	1653.2	2155.7	1432.7	2588.3	6.79	2588.3	33.61	SDI E-FIELD
4187.0	93.77	33.69	1650.9	2182.2	1450.4	2620.2	2.42	2620.2	33.61	SDI E-FIELD
4220.0	91.28	33.97	1649.4	2209.6	1468.8	2653.2	7.59	2653.2	33.61	SDI E-FIELD
4250.0	91.18	34.56	1648.8	2234.4	1485.7	2683.2	1.99	2683.2	33.62	SDI E-FIELD
4281.0	91.75	32.55	1648.0	2260.2	1502.8	2714.2	6.74	2714.2	33.62	SDI E-FIELD
4311.0	91.75	32.55	1647.1	2285.5	1518.9	2744.2	0.00	2744.2	33.61	PROJECTED DEPTH

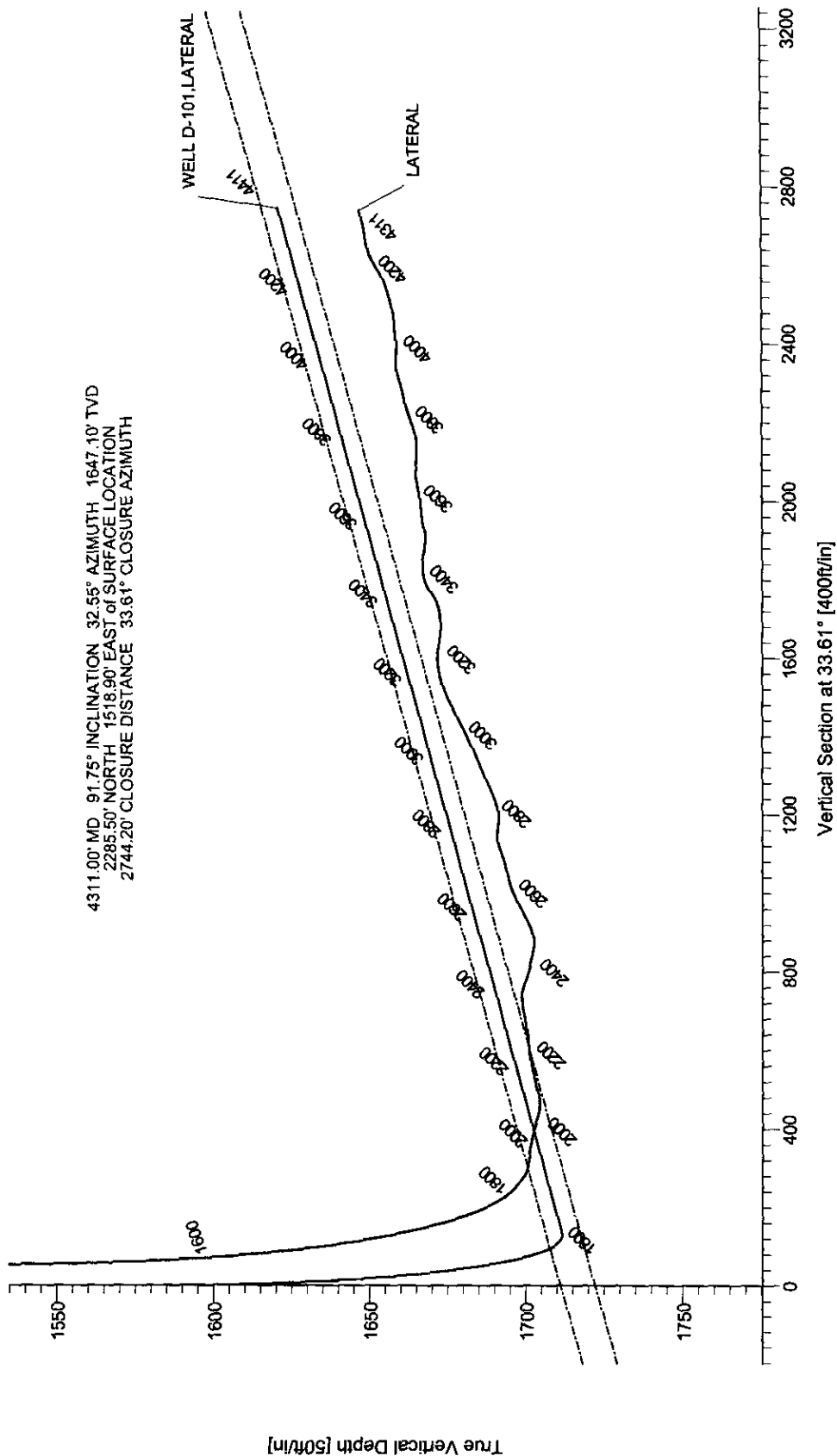


EL PASO PRODUCTION

RATON WELL D-101
LATERAL
VERMEJO FIELD, NEW MEXICO



ALL DEPTHS SHOWN ARE
MEASURED DEPTHS





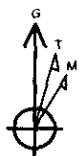
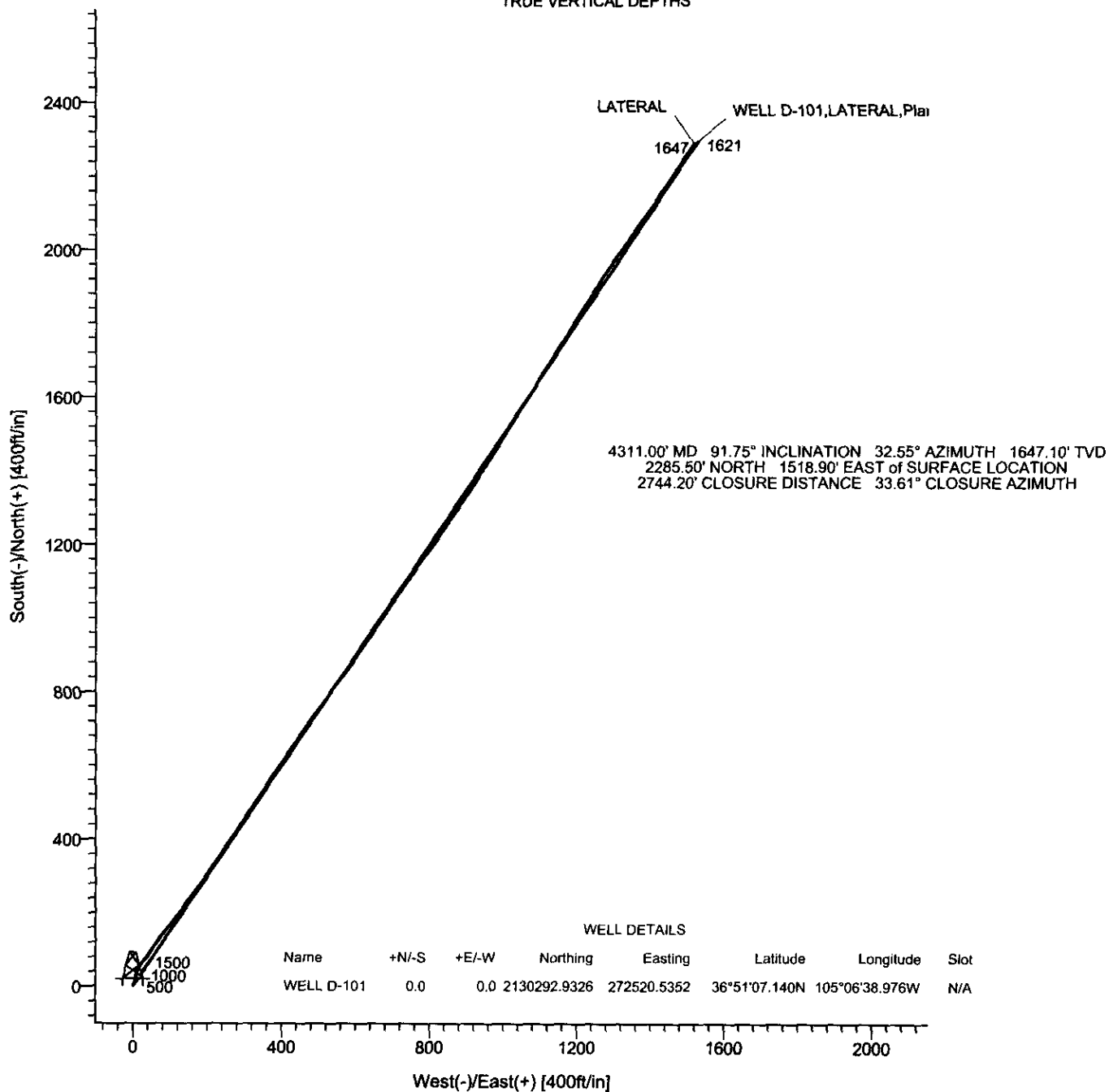
Scientific Drilling

EL PASO PRODUCTION

RATON WELL D-101
LATERAL
VERMEJO FIELD, NEW MEXICO

el paso Production

ALL DEPTHS SHOWN ARE
TRUE VERTICAL DEPTHS



Azimuths to Grid North
True North: 0.47°
Magnetic North: 9.93°

Magnetic Field
Strength: 51830nT
Dip Angle: 64.22°
Date: 4/20/2005
Model: igr2005

May 16, 2005
Scientific Drilling
281.443.4600