| DATE 5/22/03 | SUSPENSE 6/11/03 | ENGINEER MS | LOGGED IN KV | TYPE NSL | APP NO. pKRV0314336892 |
|---|---|---|---|---|---|

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

# ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

**[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]**
**[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]**
**[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]**
**[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]**
**[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]**
**[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]**

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

RECEIVED
MAY 22 2003
Oil Conservation Division

[A] Location - Spacing Unit - Simultaneous Dedication
☒ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

| WILLIAM F. CARR | William F. Carr | ATTORNEY | 5/21/03 |
|---|---|---|---|
| Print or Type Name | Signature | Title | Date |

wcarr@hollandhart.com
e-mail Address

HOLLAND & HART LLP
ATTORNEYS AT LAW

DENVER • ASPEN
BOULDER • COLORADO SPRINGS
DENVER TECH CENTER
BILLINGS • BOISE
CHEYENNE • JACKSON HOLE
SALT LAKE CITY • SANTA FE
WASHINGTON, D.C.

P.O. BOX 2208
SANTA FE, NEW MEXICO 87504-2208
110 NORTH GUADALUPE, SUITE 1
SANTA FE, NEW MEXICO 87501-6525

TELEPHONE (505) 988-4421
FACSIMILE (505) 983-6043

William F. Carr

wcarr@hollandhart.com

May 21, 2003

**HAND-DELIVERED**

Lori Wrotenbery, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: Application of Yates Petroleum Corporation for Administrative Approval of an Unorthodox Well Location for its Hinkle ALD Well No. 3 **(API No. 30-015-28415)**, located 1956 feet from the North line and 575 feet from the East line (Unit H) of Section 28, Township 19 South, Range 25 East, N.M.P.M., Eddy County, New Mexico.

Dear Ms. Wrotenbery:

Pursuant to the provisions of Rule 4 of the Special Rules and Regulations for the North Dagger Draw-Upper Pennsylvanian Pool adopted by Order No. R-4691Dated December 11, 1973, as amended, Yates Petroleum Corporation hereby seeks administrative approval of an unorthodox well location for its Hinkle ALD Well No. 3 at a point 1956 feet from the North line and 575 feet from the West line of Section 28, Township 19 South, Range 25 East, N.M.P.M., Eddy County, New Mexico. This was drilled to a depth to sufficient test all formations from the surface to through the Upper Pennsylvanian formation. The principal objective in the well is the Upper Pennsylvanian formation, North Dagger Draw-Upper Pennsylvanian Gas Pool. A standard 160-acre spacing and proration unit comprised of the NE/4 of Section 28 is dedicated to the well in the Upper Pennsylvanian formation.

The well was initially proposed to the Canyon formation at a location 1980 feet from the North line and 660' form East line and Yates initially attempted an open hole lateral completion in the well. However, the lateral completion collapsed and the well is being produced as a vertical completion in the North Dagger Draw-Upper Pennsylvanian Gas Pool. The directional survey run on the well shows that the wellbore drifted during drilling to a point 1956 feet from the North line and 575 feet from the East line of said Section 28. Attached hereto as Exhibit A is a copy of the directional survey.

Application for Administrative Approval of
Unorthodox Well Location
Hinkle ALD Well No. 3
May 21, 2003

This pool is governed by the Special Rules and Regulations for the North Dagger Draw-Upper Pennsylvanian Pool which provide for gas wells to be located on standard spacing units containing 160-acres (Order No. 4691-A, dated February 3, 1976) with wells to be located no closer than 660 feet to from the outer boundary of the spacing unit. This well location is unorthodox in the North Dagger Draw-Upper Pennsylvanian Gas Pool because it is 575 feet from the East line of the dedicated spacing unit -- or 85 feet closer to the spacing unit boundary than permitted by the applicable pool rules.

Attached hereto as Exhibits B is a plat showing the subject spacing unit, the proposed unorthodox well location and adjoining spacing units and wells. Yates Petroleum Corporation is the offset operator to the North and West and the ownership in these tracts is common with the ownership in the 160-acre spacing unit dedicated to the Hinkle ALD Well No. 3. Nearburg Exploration Company is the offset operator to the East, South and Southeast. A copy of this application, including a copy of the plat described above has been sent to Nearburg Exploration Company by certified mail-return receipt requested in accordance with Rule 1207 (A)(5). Nearburg has been a advised that if it has an objection to this application it must be filed in writing with the Division's Santa Fe office within twenty days from the date this notice was sent.

Enclosed in hard copy and disc is a proposed administrative order of the Division.

Your attention to this application is appreciated.

Very truly yours,

William F. Carr
Attorney for Yates Petroleum Corporation

Enclosures

June __, 2003

Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210

Attention: William F. Carr

*Administrative Order NSL-_____*

Dear Mr. Carr:

Reference is made to the following: **(i)** your application dated May 21, 2003 on behalf of the operator, Yates Petroleum Corporation ("Yates"); and **(ii)** the records of the New Mexico Oil Conservation Division ("Division") in Santa Fe: all concerning Yates' request for approval of a non-standard gas well location to be applicable to the Upper Pennsylvanian formation, North Dagger Draw-Upper Pennsylvanian Gas Pool which is governed by the Special Pool Rules and Regulations for the North Dagger Draw-Upper Pennsylvanian Pool initially adopted by Division Order No. R-4691, as amended, issued by the New Mexico Oil Conservation Commission in Case No. 5117 on December 11, 1973.

The NE/4 of Section 28, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico is dedicated to this well to form a standard 160-acre spacing and proration unit.

This application has been duly filed under the provisions of Rule 4 of the Special Rules and Regulations for the North Dagger Draw-Upper Pennsylvanian Pool, as revised.

The data submitted with this application indicates that the well was drilled at a standard surface location with an open hole lateral completion. The lateral completion collapsed and the well was completed as a vertical well in the North Dagger Draw-Upper Pennsylvanian Pool. The directional survey on the wellbore shows that it drifted during drilling to an unorthodox location in the Upper Pennsylvanian formation 1956 feet from the North line and 575 feet from the East line of said Section 28.

By the authority granted me under the provisions of Rule 4 of the Special Rules and Regulations for the North Dagger Draw-Upper Pennsylvanian Pool, as revised, the following described unorthodox gas well location within this 160-acre unit is hereby approved:

**Hinkle ALD Well No. 3**
**1956' FNL & 575' FEL (Unit H)**

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

at a depth of
7592 (MD)

Lori Wrotenbery
Director

cc: New Mexico Oil Conservation Division – Artesia
U. S. Bureau of Land Management – Carlsbad

**Gyrodata Incorporated**
1682 W. Sam Houston Pkwy. N.
Houston, Texas 77043

713/461-3146
Fax: 713/461-0920

**SURVEY REPORT**
**YATES PETROLEUM**
**HINKLE ALD, WELL #3-H**
**UTI #165**
**EDDY COUNTY, NM**
**MD0800GOO211**

**AUGUST 13, 2000**



EXHIBIT A

# ORIGINAL

**gyro/data**

**Gyrodata Incorporated**
1682 W. Sam Houston Pkwy. N.
Houston, Texas 77043

713/461-3146
Fax: 713/461-0920

August 29, 2000

Drilling Department
Yates Petroleum
105 South 4th Street
Artesia, NM 88210

Re: **Hinkle ALD, Well #3-H**
**Eddy County, New Mexico**

Enclosed, please find one (1) original, four (4) copies, and one (1) disk of the completed survey of the above referenced well.

We would like to take this opportunity to thank you for using Gyrodata, and we look forward to serving you in the future.

Sincerely,

Ernest E. Surman, Jr.
Assistant Operations Manager

EES:lnr

A Gyrodata Directional Survey

for

Yates Petroleum

Well: HINKLE ALD NO. 3-H, 3-1/2" DRILLPIPE

Location: UTI #165, EDDY COUNTY, NEW MEXICO

Job Number: MD0800GOO211

Run Date: 8/13/00

Surveyor: Fred Cabiad

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.750000 deg. N

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
Well: HINKLE ALD NO. 3-H, 3-1/2" DRILLPIPE
Location: UTI #165, EDDY COUNTY, NEW MEXICO
Job Number: MD0800GOO211

| MEASURED DEPTH feet | INCL deg. | AZIMUTH deg. | BORE HOLE BEARING deg. min. | DOGLEG SEVERITY deg./ 100 ft. | VERTICAL DEPTH feet | CLOSURE DIST. feet | CLOSURE AZIMUTH deg. | HORIZONTAL COORDINATES feet | |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | N 0 0 E | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 N | 0.00 E |
| 0 - 7592 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 3-1/2" DRILLPIPE<br>ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO UTI #165 R.K.B.<br>DEPTH SHIFT ADJUSTMENT DUE TO WIRELINE COUNTER CALCULATION DISCREPANCY | | | | | | | | | |
| 104.0 | 0.77 | 216.29 | S 36 18 W | 0.74 | 104.0 | 0.7 | 216.3 | 0.56 S | 0.41 W |
| 208.0 | 0.45 | 202.55 | S 22 33 W | 0.33 | 208.0 | 1.8 | 213.2 | 1.51 S | 0.98 W |
| 312.0 | 1.15 | 187.07 | S 7 4 W | 0.70 | 312.0 | 3.2 | 203.5 | 2.92 S | 1.27 W |
| 416.0 | 1.12 | 179.12 | S 0 53 E | 0.15 | 416.0 | 5.2 | 195.5 | 4.98 S | 1.38 W |
| 520.0 | 1.03 | 169.80 | S 10 12 E | 0.19 | 519.9 | 7.0 | 189.9 | 6.92 S | 1.20 W |
| 624.0 | 1.11 | 147.30 | S 32 42 E | 0.41 | 623.9 | 8.7 | 183.3 | 8.68 S | 0.49 W |
| 728.0 | 1.25 | 156.10 | S 23 54 E | 0.23 | 727.9 | 10.6 | 177.2 | 10.57 S | 0.51 E |
| 832.0 | 1.55 | 129.96 | S 50 2 E | 0.67 | 831.9 | 12.7 | 170.7 | 12.51 S | 2.05 E |
| 936.0 | 1.68 | 153.90 | S 26 6 E | 0.66 | 935.8 | 15.3 | 165.6 | 14.78 S | 3.80 E |
| 1040.0 | 1.92 | 135.42 | S 44 35 E | 0.60 | 1039.8 | 18.3 | 161.9 | 17.39 S | 5.69 E |
| 1144.0 | 1.58 | 136.82 | S 43 11 E | 0.32 | 1143.7 | 21.2 | 158.2 | 19.68 S | 7.89 E |
| 1248.0 | 1.68 | 124.44 | S 55 34 E | 0.35 | 1247.7 | 23.8 | 154.9 | 21.59 S | 10.13 E |
| 1352.0 | 1.95 | 130.76 | S 49 15 E | 0.32 | 1351.6 | 26.8 | 151.7 | 23.61 S | 12.73 E |
| 1456.0 | 1.63 | 124.70 | S 55 18 E | 0.36 | 1455.6 | 29.8 | 149.2 | 25.61 S | 15.29 E |
| 1560.0 | 1.94 | 125.60 | S 54 24 E | 0.30 | 1559.5 | 32.8 | 146.9 | 27.47 S | 17.94 E |
| 1664.0 | 1.71 | 133.82 | S 46 11 E | 0.34 | 1663.5 | 36.0 | 145.3 | 29.58 S | 20.50 E |
| 1768.0 | 1.78 | 121.48 | S 58 31 E | 0.37 | 1767.4 | 39.0 | 143.9 | 31.50 S | 22.99 E |
| 1872.0 | 1.58 | 115.69 | S 64 19 E | 0.25 | 1871.4 | 41.8 | 142.1 | 32.96 S | 25.66 E |
| 1976.0 | 1.32 | 117.83 | S 62 10 E | 0.25 | 1975.4 | 44.2 | 140.6 | 34.14 S | 28.02 E |

Yates Petroleum
Well: HINKLE ALD NO. 3-H, 3-1/2" DRILLPIPE
Location: UTI #165, EDDY COUNTY, NEW MEXICO
Job Number: MD0800GOO211

| 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 | CLOSURE AZIMUTH deg. | HORIZONTAL COORDINATES feet | |
|---|---|---|---|---|---|---|---|---|---|
| 2080.0 | 1.57 | 126.40 | S 53 36 E | 0.32 | 2079.3 | 46.7 | 139.6 | 35.55 S | 30.23 E |
| 2184.0 | 1.48 | 111.49 | S 68 31 E | 0.39 | 2183.3 | 49.2 | 138.5 | 36.89 S | 32.63 E |
| 2288.0 | 1.58 | 109.72 | S 70 17 E | 0.10 | 2287.3 | 51.7 | 137.1 | 37.87 S | 35.23 E |
| 2392.0 | 1.57 | 104.22 | S 75 47 E | 0.15 | 2391.2 | 54.2 | 135.6 | 38.70 S | 37.95 E |
| 2496.0 | 1.28 | 112.24 | S 67 46 E | 0.34 | 2495.2 | 56.5 | 134.3 | 39.48 S | 40.40 E |
| 2600.0 | 1.24 | 96.69 | S 83 19 E | 0.33 | 2599.2 | 58.5 | 133.2 | 40.05 S | 42.59 E |
| 2704.0 | 1.52 | 104.43 | S 75 34 E | 0.32 | 2703.1 | 60.6 | 132.0 | 40.53 S | 45.05 E |
| 2808.0 | 1.20 | 105.25 | S 74 45 E | 0.31 | 2807.1 | 62.8 | 130.9 | 41.16 S | 47.43 E |
| 2912.0 | 1.32 | 88.62 | N 88 37 E | 0.37 | 2911.1 | 64.7 | 129.8 | 41.42 S | 49.68 E |
| 3016.0 | 1.35 | 104.39 | S 75 37 E | 0.35 | 3015.0 | 66.7 | 128.7 | 41.69 S | 52.07 E |
| 3120.0 | 1.25 | 83.53 | N 83 32 E | 0.46 | 3119.0 | 68.6 | 127.6 | 41.87 S | 54.39 E |
| 3224.0 | 1.08 | 82.54 | N 82 32 E | 0.17 | 3223.0 | 70.2 | 126.4 | 41.61 S | 56.48 E |
| 3328.0 | 0.92 | 76.33 | N 76 20 E | 0.19 | 3327.0 | 71.4 | 125.3 | 41.29 S | 58.26 E |
| 3432.0 | 0.92 | 89.37 | N 89 22 E | 0.20 | 3431.0 | 72.6 | 124.4 | 41.08 S | 59.91 E |
| 3536.0 | 0.89 | 87.20 | N 87 12 E | 0.04 | 3535.0 | 74.0 | 123.7 | 41.03 S | 61.55 E |
| 3640.0 | 0.92 | 61.49 | N 61 29 E | 0.39 | 3638.9 | 75.0 | 122.8 | 40.60 S | 63.09 E |
| 3744.0 | 1.05 | 79.52 | N 79 31 E | 0.32 | 3742.9 | 76.1 | 121.7 | 40.03 S | 64.75 E |
| 3848.0 | 1.03 | 78.84 | N 78 50 E | 0.02 | 3846.9 | 77.5 | 120.8 | 39.67 S | 66.61 E |
| 3952.0 | 1.31 | 65.29 | N 65 18 E | 0.37 | 3950.9 | 78.9 | 119.6 | 39.00 S | 68.60 E |
| 4056.0 | 1.13 | 72.94 | N 72 56 E | 0.23 | 4054.9 | 80.3 | 118.4 | 38.20 S | 70.66 E |
| 4160.0 | 1.38 | 50.21 | N 50 13 E | 0.53 | 4158.8 | 81.5 | 117.1 | 37.10 S | 72.61 E |
| 4264.0 | 1.43 | 50.42 | N 50 25 E | 0.05 | 4262.8 | 82.6 | 115.4 | 35.47 S | 74.57 E |
| 4368.0 | 1.15 | 40.00 | N 40 0 E | 0.35 | 4366.8 | 83.4 | 113.9 | 33.84 S | 76.24 E |
| 4472.0 | 1.37 | 26.27 | N 26 16 E | 0.36 | 4470.8 | 83.8 | 112.4 | 31.93 S | 77.46 E |

Yates Petroleum
Well: HINKLE ALD NO. 3-H, 3-1/2" DRILLPIPE
Location: UTI #165, EDDY COUNTY, NEW MEXICO
Job Number: MD0800GOO211

| 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 | CLOSURE AZIMUTH deg. | HORIZONTAL COORDINATES feet | |
|---|---|---|---|---|---|---|---|---|---|
| 4576.0 | 1.43 | 36.05 | N 36 3 E | 0.24 | 4574.7 | 84.2 | 110.7 | 29.76 S | 78.78 E |
| 4680.0 | 1.94 | 24.07 | N 24 4 E | 0.59 | 4678.7 | 84.7 | 108.7 | 27.11 S | 80.25 E |
| 4784.0 | 2.05 | 25.95 | N 25 57 E | 0.12 | 4782.6 | 85.2 | 106.3 | 23.84 S | 81.78 E |
| 4888.0 | 2.19 | 9.94 | N 9 57 E | 0.58 | 4886.5 | 85.4 | 103.7 | 20.21 S | 82.94 E |
| 4992.0 | 2.07 | 12.82 | N 12 49 E | 0.15 | 4990.5 | 85.3 | 101.1 | 16.43 S | 83.70 E |
| 5096.0 | 2.37 | 14.35 | N 14 21 E | 0.29 | 5094.4 | 85.6 | 98.4 | 12.52 S | 84.65 E |
| 5200.0 | 2.09 | 10.37 | N 10 22 E | 0.30 | 5198.3 | 86.0 | 95.7 | 8.57 S | 85.52 E |
| 5304.0 | 2.16 | 11.86 | N 11 52 E | 0.08 | 5302.2 | 86.4 | 93.2 | 4.79 S | 86.27 E |
| 5408.0 | 2.35 | 1.05 | N 1 3 E | 0.45 | 5406.2 | 86.7 | 90.5 | 0.75 S | 86.71 E |
| 5512.0 | 2.13 | 5.35 | N 5 21 E | 0.26 | 5510.1 | 87.0 | 87.8 | 3.30 N | 86.93 E |
| 5616.0 | 2.27 | 357.83 | N 2 10 W | 0.31 | 5614.0 | 87.3 | 85.2 | 7.28 N | 87.03 E |
| 5720.0 | 1.68 | 358.13 | N 1 52 W | 0.57 | 5718.0 | 87.6 | 82.9 | 10.86 N | 86.90 E |
| 5824.0 | 1.74 | 357.59 | N 2 24 W | 0.07 | 5821.9 | 87.9 | 80.9 | 13.96 N | 86.79 E |
| 5928.0 | 1.72 | 358.88 | N 1 7 W | 0.04 | 5925.9 | 88.4 | 78.8 | 17.10 N | 86.69 E |
| 6032.0 | 1.72 | 352.85 | N 7 9 W | 0.17 | 6029.8 | 88.8 | 76.8 | 20.21 N | 86.46 E |
| 6136.0 | 1.28 | 333.99 | N 26 1 W | 0.63 | 6133.8 | 88.7 | 75.1 | 22.80 N | 85.76 E |
| 6240.0 | 0.93 | 333.74 | N 26 16 W | 0.33 | 6237.8 | 88.4 | 73.8 | 24.60 N | 84.88 E |
| 6344.0 | 0.98 | 340.65 | N 19 21 W | 0.12 | 6341.7 | 88.2 | 72.7 | 26.20 N | 84.21 E |
| 6448.0 | 0.88 | 303.01 | N 57 0 W | 0.59 | 6445.7 | 87.7 | 71.7 | 27.48 N | 83.24 E |
| 6552.0 | 0.46 | 328.46 | N 31 33 W | 0.49 | 6549.7 | 87.1 | 71.1 | 28.27 N | 82.35 E |
| 6656.0 | 0.32 | 55.60 | N 55 36 E | 0.53 | 6653.7 | 87.3 | 70.7 | 28.79 N | 82.38 E |
| 6760.0 | 0.29 | 15.39 | N 15 23 E | 0.20 | 6757.7 | 87.7 | 70.5 | 29.21 N | 82.69 E |
| 6864.0 | 0.22 | 135.89 | S 44 7 E | 0.43 | 6861.7 | 87.9 | 70.5 | 29.32 N | 82.90 E |
| 6968.0 | 0.41 | 117.92 | S 62 5 E | 0.20 | 6965.7 | 88.3 | 70.8 | 29.00 N | 83.37 E |

A Gyrodata Directional Survey

Yates Petroleum
Well: HINKLE ALD NO. 3-H, 3-1/2" DRILLPIPE
Location: UTI #165, EDDY COUNTY, NEW MEXICO
Job Number: MD0800GOO211

| MEASURED DEPTH feet | INCL deg. | AZIMUTH deg. | BORE HOLE BEARING deg. min. | DOGLEG SEVERITY deg./ 100 ft. | VERTICAL DEPTH feet | CLOSURE DIST. feet | CLOSURE AZIMUTH deg. | HORIZONTAL COORDINATES feet | |
|---|---|---|---|---|---|---|---|---|---|
| 7072.0 | 0.88 | 189.95 | S 9 57 W | 0.82 | 7069.7 | 88.1 | 71.5 | 28.03 N | 83.57 E |
| 7176.0 | 0.72 | 186.54 | S 6 33 W | 0.16 | 7173.7 | 87.5 | 72.3 | 26.60 N | 83.36 E |
| 7280.0 | 0.82 | 161.57 | S 18 26 E | 0.33 | 7277.7 | 87.2 | 73.2 | 25.25 N | 83.51 E |
| 7384.0 | 0.36 | 122.37 | S 57 38 E | 0.56 | 7381.7 | 87.5 | 73.8 | 24.37 N | 84.03 E |
| 7488.0 | 0.26 | 142.07 | S 37 56 E | 0.14 | 7485.7 | 87.8 | 74.1 | 24.01 N | 84.45 E |
| 7592.0 | 0.31 | 161.49 | S 18 30 E | 0.10 | 7589.7 | 87.9 | 74.5 | 23.56 N | 84.68 E |

Final Station Closure: Distance: 87.90 ft Az: 74.46 deg.

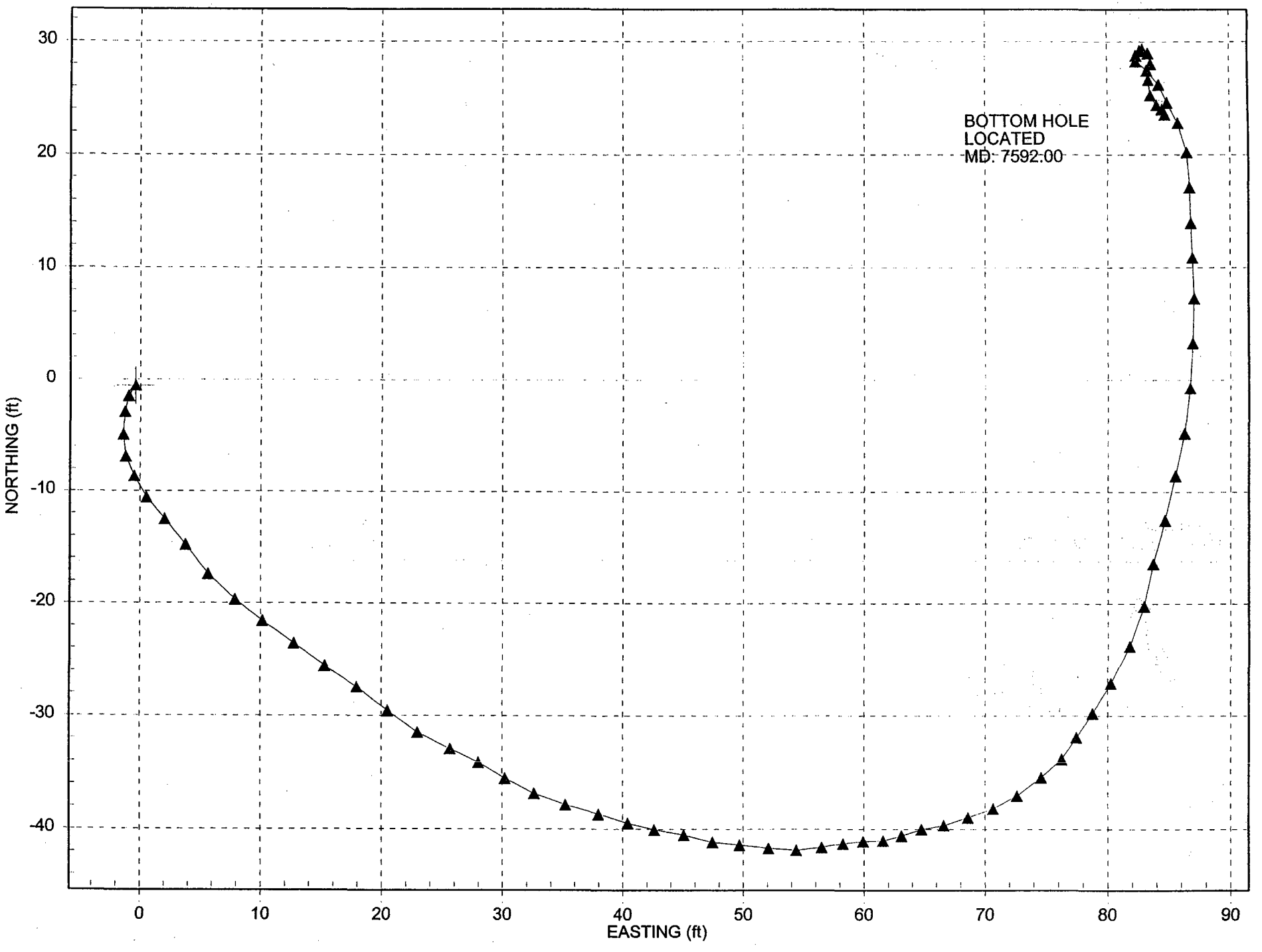
1980' FNL - 660' FEL

1980
- 24
1956

5 51
X90
- 85
575

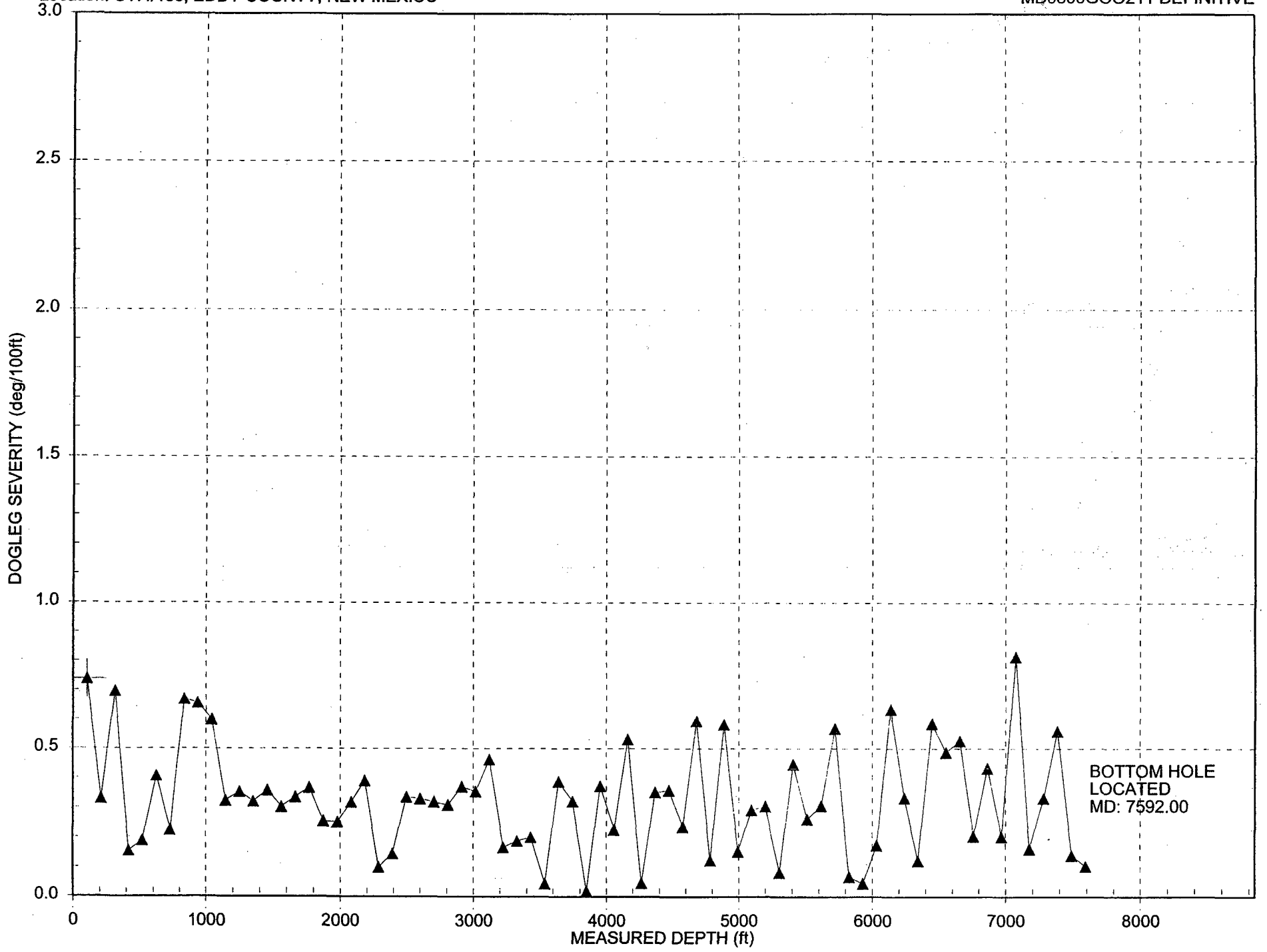
Yates Petroleum
Well: HINKLE ALD NO. 3-H 3-1/2" DRILLPIPE
Location: UTI #165, EDDY COUNTY, NEW MEXICO

Gyrodata, Inc.
MD0800GOO211 DEFINITIVE



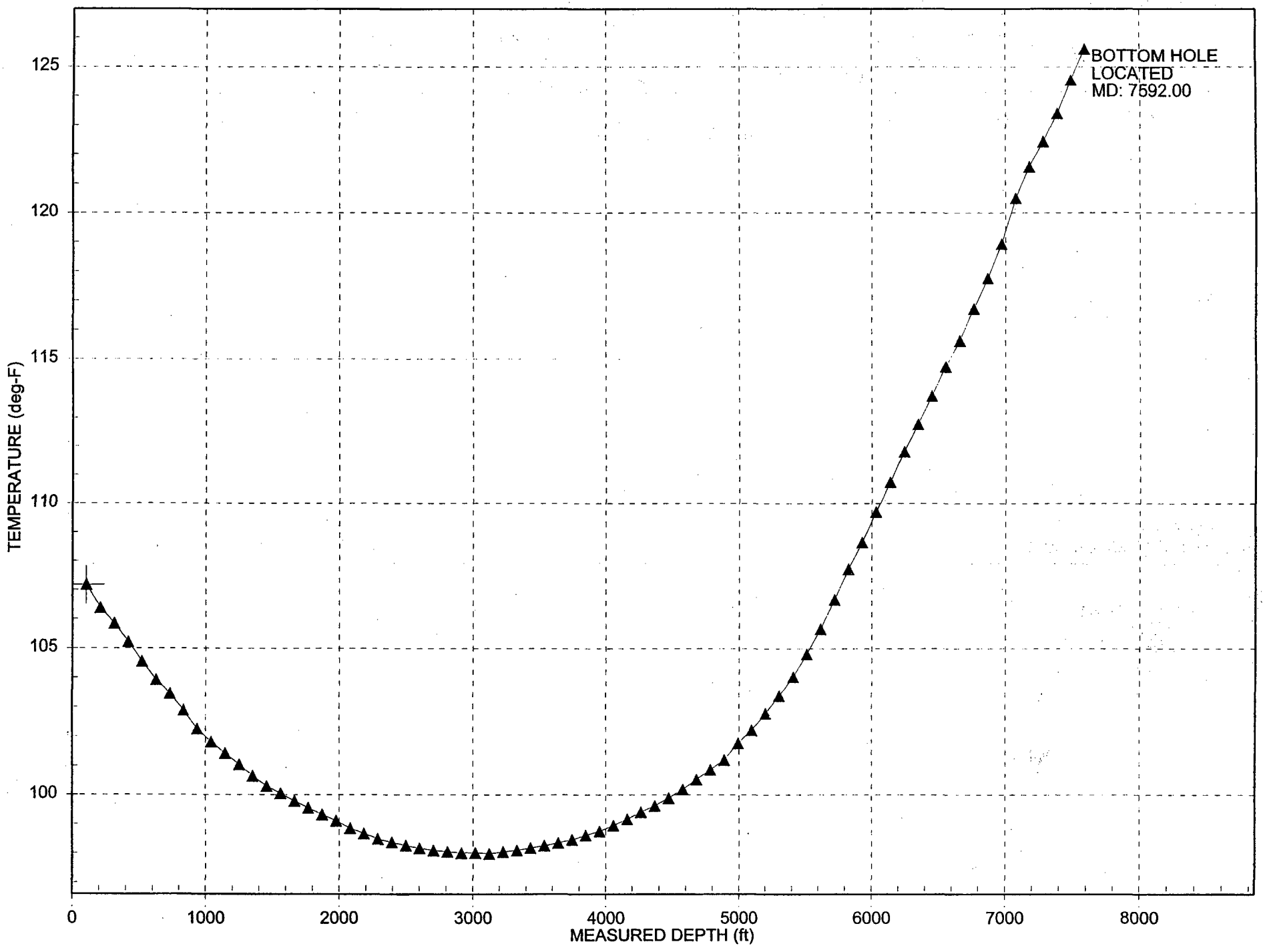
Yates Petroleum
Well: HINKLE ALD NO. 3-H 3-1/2" DRILLPIPE
Location: UTI #165, EDDY COUNTY, NEW MEXICO

Gyrodata, Inc.
MD0800GOO211 DEFINITIVE



Yates Petroleum
Well: HINKLE ALD NO. 3-H 3-1/2" DRILLPIPE
Location: UTI #165, EDDY COUNTY, NEW MEXICO

Gyrodata, Inc.
MD0800GOO211 DEFINITIVE



Weatherford®

# PERFORMANCE CERTIFICATION

Re: Directional Survey Filing
Certification No. P 502 911 150

For: Yates Petroleum
Hinkle ALD #3-H
Eddy County, New Mexico

Dear Sirs,

I, Dewayne Fobes, Field Engineer, certify: that I am employed by Weatherford; that I did on the days of August 14 through August 31, 2000, conduct or supervise the taking of a steering tool survey from a depth of 7656.0 feet to a depth of 8581.0 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Weatherford; that I am authorized and qualified to make this report; that this survey was conducted at the request of Yates for the Hinkle ALD #3-H Well in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Weatherford.

Sincerely,
**Weatherford**

Dewayne Fobes
Field Engineer

DF/mc
Job # 0074

ENTERED FEB 0 7 2002

Closure Information from Station 0 to the Last Station Pre ed:

Closure Distance: 892.1

Closure Direction: 6.6

## Guidance Serices

## Survey Calculation



Weatherford

Customer: YATES PETROLEUM
Well Name: HINKLE ALD #3-H
Well No.:
County: EDDY
State: NM

Survey Type: Minimum Radius of Curvature
Survey Operator: MURPHY
Starting Date:
Proposed Direction: 355.7
Declination Used: 10.0

| tation | MD | Inc | Dir | TVD | VS | N-S | E-W | Dogleg | TF Offset | Probe | Temp |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7641.0 | 4.4 | 18.5 | 7638.6 | 20.0 | 26.5N | 85.7E | 3.1 | 0.00 | 0 | 0.0 |
| 2 | 7643.0 | 4.9 | 18.8 | 7640.6 | 20.1 | 26.7N | 85.7E | 22.5 | 0.00 | 0 | 0.0 |
| 3 | 7656.0 | 11.0 | 27.5 | 7653.5 | 21.7 | 28.3N | 86.5E | 48.1 | 204.38 | 2607 | 94.7 |
| 4 | 7661.0 | 13.2 | 25.2 | 7658.4 | 22.6 | 29.2N | 86.9E | 45.0 | 204.38 | 2607 | 94.7 |
| 5 | 7666.0 | 15.6 | 25.0 | 7663.2 | 23.7 | 30.4N | 87.5E | 48.0 | 204.38 | 2607 | 94.6 |
| 6 | 7671.0 | 18.0 | 24.6 | 7668.0 | 24.9 | 31.7N | 88.1E | 48.1 | 204.38 | 2607 | 94.5 |
| 7 | 7676.0 | 20.7 | 23.1 | 7672.7 | 26.4 | 33.2N | 88.7E | 54.9 | 204.38 | 2607 | 93.8 |
| 8 | 7681.0 | 23.8 | 21.9 | 7677.3 | 28.1 | 34.9N | 89.5E | 62.7 | 204.38 | 2607 | 94.2 |
| 9 | 7686.0 | 26.8 | 20.6 | 7681.8 | 30.0 | 36.9N | 90.2E | 61.0 | 204.38 | 2607 | 94.0 |
| 10 | 7691.0 | 29.7 | 19.2 | 7686.3 | 32.2 | 39.2N | 91.0E | 59.5 | 204.38 | 2607 | 93.6 |
| 11 | 7696.0 | 32.7 | 17.9 | 7690.5 | 34.6 | 41.6N | 91.9E | 61.5 | 204.38 | 2607 | 93.4 |
| 12 | 7701.0 | 35.0 | 17.2 | 7694.7 | 37.1 | 44.3N | 92.7E | 46.7 | 204.38 | 2607 | 93.4 |
| 13 | 7706.0 | 37.6 | 16.7 | 7698.7 | 39.9 | 47.1N | 93.6E | 52.3 | 204.38 | 2607 | 93.1 |
| 14 | 7711.0 | 40.4 | 17.0 | 7702.6 | 42.8 | 50.1N | 94.5E | 56.1 | 204.38 | 2607 | 93.0 |
| 15 | 7716.0 | 44.1 | 18.6 | 7706.3 | 46.0 | 53.3N | 95.5E | 77.1 | 138.94 | 2440 | 125.8 |
| 16 | 7721.0 | 48.4 | 18.9 | 7709.8 | 49.3 | 56.7N | 96.7E | 86.1 | 138.94 | 2440 | 118.7 |
| 17 | 7726.0 | 50.7 | 18.7 | 7713.0 | 52.8 | 60.3N | 97.9E | 46.1 | 138.94 | 2440 | 113.7 |
| 18 | 7731.0 | 54.1 | 18.1 | 7716.0 | 56.4 | 64.1N | 99.1E | 68.7 | 0.00 | 0 | 0.0 |
| 19 | 7736.0 | 57.5 | 16.8 | 7718.9 | 60.3 | 68.0N | 100.4E | 71.3 | 138.94 | 2440 | 108.6 |
| 20 | 7741.0 | 59.6 | 15.7 | 7721.5 | 64.3 | 72.1N | 101.6E | 46.0 | 138.94 | 2440 | 107.7 |
| 21 | 7746.0 | 63.5 | 14.9 | 7723.8 | 68.4 | 76.4N | 102.7E | 79.3 | 138.94 | 2440 | 108.1 |
| 22 | 7751.0 | 66.7 | 14.7 | 7726.0 | 72.7 | 80.8N | 103.9E | 64.1 | 138.94 | 2440 | 105.9 |
| 23 | 7756.0 | 69.8 | 13.9 | 7727.8 | 77.1 | 85.3N | 105.0E | 63.8 | 138.94 | 2440 | 105.5 |
| 24 | 7761.0 | 72.7 | 14.4 | 7729.4 | 81.6 | 89.8N | 106.2E | 58.8 | 138.94 | 2440 | 105.4 |
| 25 | 7766.0 | 76.3 | 13.4 | 7730.7 | 86.1 | 94.5N | 107.3E | 74.5 | 138.94 | 2440 | 104.2 |
| 26 | 7771.0 | 79.1 | 14.0 | 7731.8 | 90.8 | 99.3N | 108.5E | 57.2 | 138.94 | 2440 | 108.1 |
| 27 | 7775.0 | 100.3 | 11.7 | 7731.8 | 94.6 | 103.1N | 109.4E | 533.1 | 138.94 | 2440 | 94.1 |
| 28 | 7776.0 | 82.2 | 13.9 | 7732.6 | 95.5 | 104.1N | 109.7E | 62.0 | 138.94 | 2440 | 104.1 |
| 29 | 7781.0 | 85.0 | 13.6 | 7733.2 | 100.2 | 108.9N | 110.9E | 56.3 | 138.94 | 2440 | 102.0 |
| 30 | 7786.0 | 87.5 | 11.9 | 7733.5 | 105.0 | 113.7N | 112.0E | 60.4 | 138.94 | 2440 | 101.1 |
| 31 | 7820.0 | 92.9 | 11.9 | 7733.4 | 137.6 | 147.0N | 119.0E | 15.9 | 138.94 | 2440 | 95.7 |
| 32 | 7851.0 | 94.1 | 12.6 | 7731.5 | 167.3 | 177.2N | 125.5E | 4.5 | 138.94 | 2440 | 96.7 |
| 33 | 7883.0 | 97.7 | 12.6 | 7728.2 | 197.7 | 208.3N | 132.5E | 11.3 | 138.94 | 2440 | 94.1 |
| 34 | 7913.0 | 98.7 | 11.5 | 7723.9 | 226.2 | 237.3N | 138.7E | 4.9 | 138.94 | 2440 | 93.1 |
| 35 | 7947.0 | 99.4 | 12.4 | 7718.6 | 258.4 | 270.2N | 145.6E | 3.3 | 138.94 | 2440 | 96.7 |
| 36 | 7978.0 | 100.3 | 11.7 | 7713.3 | 287.7 | 300.1N | 152.0E | 3.7 | 138.94 | 2440 | 94.4 |
| 37 | 8010.0 | 100.3 | 11.1 | 7707.6 | 318.0 | 330.9N | 158.2E | 1.8 | 138.94 | 2440 | 96.2 |
| 38 | 8042.0 | 99.6 | 9.8 | 7702.0 | 348.5 | 361.9N | 164.0E | 4.6 | 138.94 | 2440 | 101.5 |
| 39 | 8074.0 | 98.6 | 6.5 | 7697.0 | 379.3 | 393.2N | 168.4E | 10.7 | 138.94 | 2440 | 97.5 |
| 40 | 8106.0 | 98.1 | 7.4 | 7692.3 | 410.4 | 424.6N | 172.3E | 3.2 | 138.94 | 2440 | 98.0 |
| 41 | 8138.0 | 97.6 | 6.5 | 7687.9 | 441.5 | 456.1N | 176.1E | 3.2 | 138.94 | 2440 | 97.6 |
| 42 | 8169.0 | 96.8 | 5.6 | 7684.1 | 471.7 | 486.7N | 179.3E | 3.9 | 138.94 | 2440 | 103.6 |
| 43 | 8200.0 | 95.8 | 2.0 | 7680.7 | 502.2 | 517.4N | 181.4E | 12.0 | 138.94 | 2440 | 95.7 |
| 44 | 8232.0 | 95.0 | 0.2 | 7677.6 | 533.9 | 549.3N | 182.0E | 6.1 | 138.94 | 2440 | 95.3 |
| 45 | 8264.0 | 94.4 | 357.4 | 7675.0 | 565.8 | 581.1N | 181.3E | 8.9 | 138.94 | 2440 | 100.1 |
| 46 | 8295.0 | 93.4 | 355.4 | 7672.9 | 596.7 | 612.0N | 179.4E | 7.2 | 138.94 | 2440 | 97.4 |
| 47 | 8326.0 | 92.9 | 352.3 | 7671.2 | 627.6 | 642.8N | 176.1E | 10.1 | 138.94 | 2440 | 99.8 |
| 48 | 8358.0 | 90.9 | 349.0 | 7670.2 | 659.5 | 674.3N | 170.9E | 12.1 | 138.94 | 2440 | 98.9 |
| 49 | 8390.0 | 88.6 | 346.2 | 7670.3 | 691.2 | 705.6N | 164.0E | 11.3 | 138.94 | 2440 | 99.4 |
| 50 | 8422.0 | 88.7 | 345.1 | 7671.0 | 722.7 | 736.6N | 156.1E | 3.5 | 138.94 | 2440 | 101.4 |

ENTERED FEB 0 7 2002

Closure Information from Station 0 to the Last Station Presented:

Guidance Serices

Survey Calculation



Weatherford

Customer: YATES PETROLEUM
Well Name: HINKLE ALD #3-H
Well No.:
County: EDDY
State: NM

Survey Type: Minimum Radius of Curvature
Survey Operator: MURPHY
Starting Date:
Proposed Direction: 355.7
Declination Used: 10.0

| Station | MD | Inc | Dir | TVD | VS | N-S | E-W | Dogleg | TF Offset | Probe | Temp |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 51 | 8454.0 | 88.7 | 342.2 | 7671.8 | 754.0 | 767.3N | 147.1E | 9.1 | 138.94 | 2440 | 98.8 |
| 52 | 8486.0 | 89.1 | 339.6 | 7672.4 | 784.9 | 797.5N | 136.6E | 8.2 | 138.94 | 2440 | 96.5 |
| 53 | 8517.0 | 89.2 | 339.3 | 7672.8 | 814.7 | 826.5N | 125.7E | 1.0 | 138.94 | 2440 | 99.8 |
| 54 | 8549.0 | 88.7 | 339.1 | 7673.4 | 845.3 | 856.4N | 114.4E | 1.7 | 138.94 | 2440 | 100.7 |
| 55 | 8581.0 | 89.0 | 337.7 | 7674.1 | 875.9 | 886.2N | 102.6E | 4.5 | 138.94 | 2440 | 101.9 |

| | |
|---|---|
| Job Number: WTX0800248 | State/Country: New Mexico |
| Company: Yates Petroleum | Declination: 10 |
| Lease/Well: Hinkle ALD #3-H | Grid: |
| Location: Eddey County | File name: C:\WINSERVE\HINKLE#3.SVY |
| Rig Name: UTI #166 | Date/Time: 31-Aug-00 / 18:03 |
| RKB: | Curve Name: New Sidetrack #2 |
| G.L. or M.S.L.: | |

FINAL CALCULATIONS

WINSERVE SURVEY CALCULATIONS
*Minimum Curvature Method*
*Vertical Section Plane 355.67*
*Vertical Section Referenced to Wellhead*
*Rectangular Coordinates Referenced to Wellhead*

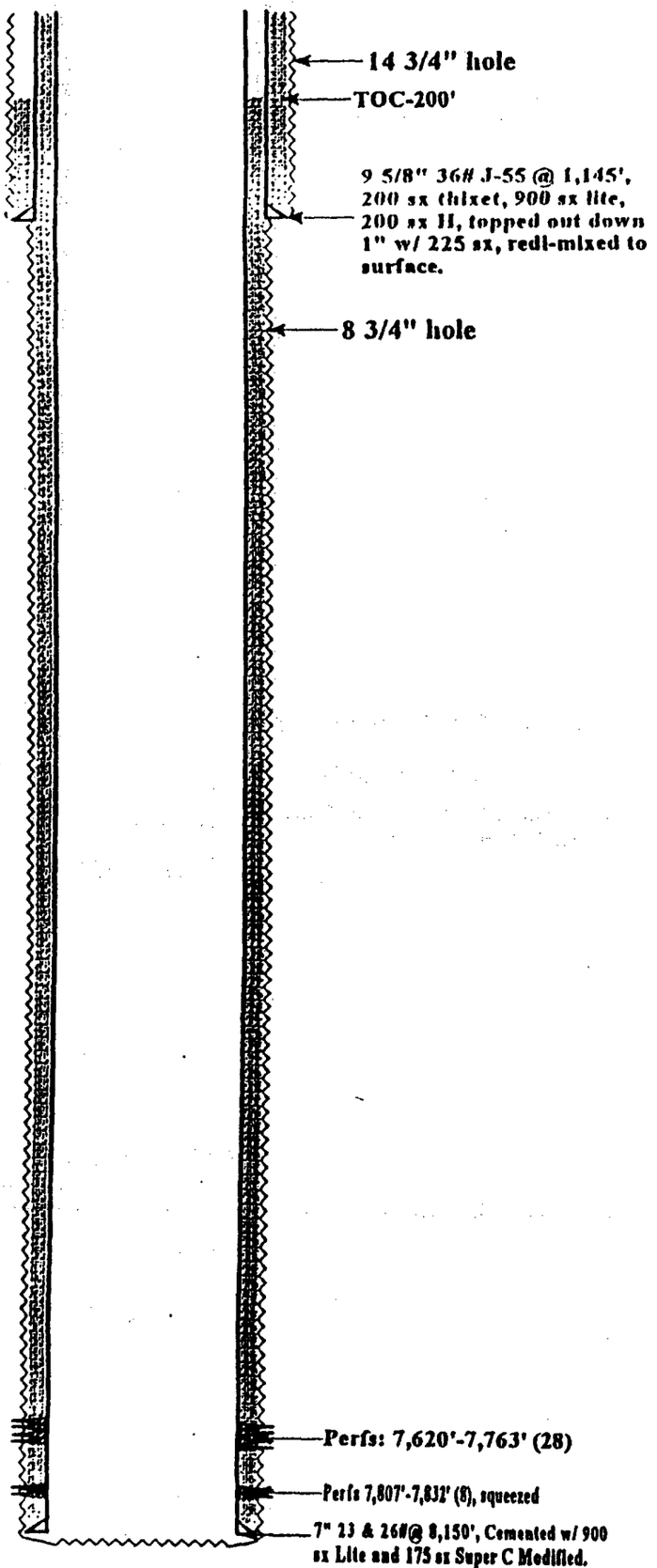
| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | True Vertical Depth | N-S FT | E-W FT | Vertical Section FT | CLOSURE Distance FT | CLOSURE Direction Deg | Dogleg Severity Deg/100 | BUILD RATE Deg/100 |
|---|---|---|---|---|---|---|---|---|---|---|
| Gyro Tie In | | | | | | | | | | |
| 7592.00 | .31 | 161.49 | 7589.70 | 23.56 | 84.68 | 17.10 | 87.90 | 74.45 | .00 | .00 |
| 7641.00 | 4.40 | 18.50 | 7638.65 | 25.22 | 85.32 | 18.70 | 88.97 | 73.53 | 9.49 | 8.35 |
| 7643.00 | 4.90 | 18.80 | 7640.65 | 25.37 | 85.37 | 18.85 | 89.06 | 73.45 | 25.03 | 25.00 |
| 7647.00 | 6.90 | 18.40 | 7644.63 | 25.76 | 85.50 | 19.23 | 89.30 | 73.23 | 50.01 | 50.00 |
| 7657.00 | 10.10 | 14.92 | 7654.52 | 27.18 | 85.92 | 20.61 | 90.11 | 72.45 | 32.40 | 32.00 |
| Last shot of old hole | | | | | | | | | | |
| 7662.00 | 11.50 | 11.84 | 7659.43 | 28.09 | 86.13 | 21.51 | 90.60 | 71.94 | 30.28 | 28.00 |
| 7676.00 | 20.70 | 23.10 | 7672.87 | 31.74 | 87.39 | 25.05 | 92.98 | 70.04 | 69.10 | 65.71 |
| 7681.00 | 23.80 | 21.90 | 7677.49 | 33.49 | 88.12 | 26.74 | 94.27 | 69.19 | 62.66 | 62.00 |
| 7686.00 | 26.80 | 20.60 | 7682.01 | 35.46 | 88.89 | 28.67 | 95.71 | 68.24 | 61.02 | 60.00 |
| 7691.00 | 29.70 | 19.20 | 7686.42 | 37.71 | 89.69 | 30.83 | 97.30 | 67.20 | 59.49 | 58.00 |
| 7696.00 | 32.70 | 17.90 | 7690.69 | 40.16 | 90.52 | 33.21 | 99.03 | 66.07 | 61.49 | 60.00 |
| 7701.00 | 35.00 | 17.20 | 7694.85 | 42.62 | 91.35 | 35.80 | 100.89 | 64.89 | 46.66 | 46.00 |
| 7706.00 | 37.60 | 16.70 | 7698.86 | 45.65 | 92.22 | 38.56 | 102.90 | 63.66 | 52.34 | 52.00 |
| 7711.00 | 40.40 | 17.00 | 7702.76 | 48.66 | 93.13 | 41.49 | 105.08 | 62.41 | 56.13 | 56.00 |
| 7716.00 | 44.10 | 18.60 | 7706.46 | 51.86 | 94.16 | 44.60 | 107.50 | 61.16 | 77.06 | 74.00 |
| 7721.00 | 48.40 | 18.90 | 7709.92 | 55.28 | 95.32 | 47.92 | 110.19 | 59.89 | 86.11 | 86.00 |
| 7726.00 | 50.70 | 18.70 | 7713.16 | 58.88 | 96.55 | 51.42 | 113.08 | 58.62 | 46.10 | 46.00 |
| 7731.00 | 54.10 | 18.10 | 7716.21 | 62.64 | 97.80 | 55.08 | 116.14 | 57.36 | 68.66 | 68.00 |

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | True Vertical Depth | N-S FT | E-W FT | Vertical Section FT | CLOSURE Distance FT | CLOSURE Direction Deg | Dogleg Severity Deg/100 | BUILD RATE Deg/100 |
|---|---|---|---|---|---|---|---|---|---|---|
| 7736.00 | 57.50 | 16.80 | 7719.02 | 66.58 | 99.03 | 58.92 | 119.34 | 56.09 | 71.32 | 68.00 |
| 7741.00 | 59.60 | 15.70 | 7721.63 | 70.68 | 100.23 | 62.91 | 122.64 | 54.81 | 46.00 | 42.00 |
| 7746.00 | 63.50 | 14.90 | 7724.01 | 74.92 | 101.39 | 67.05 | 126.06 | 53.54 | 79.26 | 78.00 |
| 7751.00 | 66.70 | 14.70 | 7726.12 | 79.30 | 102.54 | 71.33 | 129.63 | 52.28 | 64.10 | 64.00 |
| 7756.00 | 69.80 | 13.90 | 7727.97 | 83.80 | 103.69 | 75.73 | 133.32 | 51.06 | 63.76 | 62.00 |
| 7761.00 | 72.70 | 14.40 | 7729.58 | 88.39 | 104.85 | 80.22 | 137.14 | 49.87 | 58.77 | 58.00 |
| 7766.00 | 76.30 | 13.40 | 7730.91 | 93.07 | 106.01 | 84.80 | 141.06 | 48.72 | 74.53 | 72.00 |
| 7771.00 | 79.10 | 14.00 | 7731.98 | 97.81 | 107.16 | 89.44 | 145.09 | 47.61 | 57.21 | 56.00 |
| 7776.00 | 82.20 | 13.90 | 7732.79 | 102.60 | 108.35 | 94.13 | 149.22 | 46.56 | 62.03 | 62.00 |
| 7781.00 | 85.00 | 13.60 | 7733.35 | 107.43 | 109.53 | 98.85 | 153.42 | 45.58 | 56.32 | 56.00 |
| 7786.00 | 87.50 | 11.90 | 7733.67 | 112.29 | 110.63 | 103.62 | 157.64 | 44.57 | 60.42 | 50.00 |
| 7820.00 | 92.90 | 11.90 | 7733.56 | 145.55 | 117.64 | 136.25 | 187.15 | 38.95 | 15.88 | 15.88 |
| 7851.00 | 94.10 | 12.60 | 7731.66 | 175.79 | 124.21 | 165.91 | 215.24 | 35.24 | 4.48 | 3.87 |
| 7883.00 | 97.70 | 12.60 | 7728.37 | 206.85 | 131.15 | 196.35 | 244.92 | 32.38 | 11.25 | 11.25 |
| 7913.00 | 98.70 | 11.50 | 7724.10 | 235.88 | 137.35 | 224.84 | 272.96 | 30.21 | 4.93 | 3.33 |
| 7947.00 | 99.40 | 12.40 | 7718.75 | 268.73 | 144.30 | 257.07 | 305.03 | 28.23 | 3.33 | 2.06 |
| 7978.00 | 100.30 | 11.70 | 7713.44 | 298.80 | 150.68 | 286.37 | 334.47 | 26.78 | 3.66 | 2.90 |
| 8010.00 | 100.30 | 11.10 | 7707.72 | 329.47 | 156.90 | 316.68 | 364.92 | 25.46 | 1.84 | .00 |
| 8042.00 | 99.60 | 9.80 | 7702.19 | 360.46 | 162.62 | 347.15 | 395.44 | 24.28 | 4.56 | -2.19 |
| 8074.00 | 98.60 | 8.60 | 7697.13 | 391.65 | 167.67 | 377.87 | 426.03 | 23.18 | 4.85 | -3.13 |
| 8106.00 | 98.10 | 7.40 | 7692.48 | 423.00 | 172.07 | 408.80 | 456.66 | 22.14 | 4.03 | -1.56 |
| 8138.00 | 97.60 | 6.50 | 7688.11 | 454.47 | 175.91 | 439.89 | 487.33 | 21.16 | 3.19 | -1.56 |
| Last1.5° motor | | | | | | | | | | |
| 8169.00 | 96.80 | 5.60 | 7684.23 | 485.05 | 179.15 | 470.14 | 517.08 | 20.27 | 3.87 | -2.58 |
| 8200.00 | 95.80 | 2.00 | 7680.83 | 515.79 | 181.19 | 500.64 | 546.69 | 19.36 | 11.98 | -3.23 |
| 8232.00 | 94.90 | 359.50 | 7677.84 | 547.65 | 181.61 | 532.37 | 576.97 | 18.35 | 8.27 | -2.81 |
| 8264.00 | 94.40 | 357.40 | 7675.25 | 579.53 | 180.74 | 564.23 | 607.06 | 17.32 | 6.72 | -1.56 |
| 8295.00 | 93.40 | 355.40 | 7673.14 | 610.39 | 178.80 | 595.15 | 636.04 | 16.33 | 7.20 | -3.23 |
| 8326.00 | 92.90 | 353.60 | 7671.43 | 641.20 | 175.84 | 626.10 | 664.88 | 15.34 | 6.02 | -1.61 |
| 8358.00 | 90.90 | 349.00 | 7670.37 | 672.81 | 171.00 | 657.98 | 694.20 | 14.26 | 15.67 | -6.25 |
| Highest TVD @ 8390 | | | | | | | | | | |
| 8390.00 | 88.60 | 346.20 | 7670.51 | 704.06 | 164.13 | 689.65 | 722.93 | 13.12 | 11.32 | -7.19 |
| 8422.00 | 88.60 | 344.60 | 7671.29 | 735.01 | 156.07 | 721.13 | 751.40 | 11.99 | 5.00 | .00 |
| 8454.00 | 88.70 | 342.20 | 7672.05 | 765.67 | 146.93 | 752.39 | 779.64 | 10.86 | 7.50 | .31 |
| 8486.00 | 89.10 | 339.60 | 7672.66 | 795.90 | 136.46 | 783.32 | 807.51 | 9.73 | 8.22 | 1.25 |
| 8517.00 | 89.20 | 339.30 | 7673.12 | 824.92 | 125.58 | 813.09 | 834.43 | 8.66 | 1.02 | .32 |
| 8549.00 | 88.70 | 339.10 | 7673.71 | 854.83 | 114.22 | 843.77 | 862.43 | 7.61 | 1.68 | -1.56 |
| 8581 | | | | | | | | | | |
| 8581.00 | 89.00 | 337.70 | 7674.35 | 884.58 | 102.44 | 874.32 | 890.49 | 6.61 | 4.47 | .94 |

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | True Vertical Depth | N-S FT | E-W FT | Vertical Section FT | CLOSURE Distance FT | CLOSURE Direction Deg | Dogleg Severity Deg/100 | BUILD RATE Deg/100 |
|---|---|---|---|---|---|---|---|---|---|---|
| --Projection to Bit-- | | | | | | | | | | |
| 8509.00 | 89.26 | 336.48 | 7674.78 | 910.36 | 91.54 | 900.85 | 914.96 | 5.74 | 4.47 | .94 |

# A[illegible] PETROLEUM CORPO[illegible]A[illegible]N
## Hinkle ALD #3
### Section 28 T19S-R25E, 1,980' N & 660' E

## "BEFORE"




**TD: 8,150'**

## Comments

1/98
Perfed 7,807', 09', 11', 13', 26', 28', 30', 32' (8 holes). Swab tested. Squeezed perfs with 55 sx H and drillout out cement and retainer. Perfed 7,741', 43', 45', 47', 49', 51', 57', 59', 61', 63' (10 holes). Swab tested, set RBP @ 7,720'.Perfed 7,620', 22', 24', 26', 28', 30', 54', 56', 58', 60', 62', 64', 72', 74', 76', 78', 80', 82', (18 holes). Pumped 1300 gals IC 20% HCL, and 12,000 gals IC 20% gelled HCL. TOH with RBP and packer, ran sub pump and began producing well.

| TOPS: | |
|---|---|
| San Andres | 714' |
| Glorieta | 2,276' |
| Yeso | 2,338' |
| Wolfcamp | 6,134' |
| Canyon | 7,620' |
| CASING | |
| 7" 26# J-55 | 452' |
| 7" 23# J-55 | 5,364' |
| 7" 23# J-55 | 4,723' |
| 7" 26# J-55 | 7,354' |
| 7" 26# N-80 | 8,150' |

Prepared by Cory Frederick 6/2/00
Sketch not to scale.

# Hinkle ALD # 3-H

**Surface Location 1980' FNL & 660' FEL**
**Sec. 28, T. 19 S., R. 25 E.**
**Eddy County, NM**

## COMPLETION

| | |
|---|---|
| Production Casing: | 7" 23&26#/ft N-80 and J-55 |
| Production Tubing | 2.875" J-55 6.5#/ft. |
| MD of casing shoe: | 8,150' |
| MD Window In Casing: | 7,625' |
| MD CIBP | 7,642' |

Maximum Pressure will be 8500 psi

1. MIRU PU, ND tree and NUBOP. Rig up safety trailer if necessary. POOH with production equipment.

2. TIH with tubing, packer and seating nipple. Attempt to circulate the hole with 2% KCl water. Set the packer at 7,575'. Load the annulus with 2% KCL water.

3. RU WSC to perform a high rate acid frac via 2.875" tubing. Batch mix 32,000 of 20% gelled IC HCl acid in two lined acid tanks. Roll the chemicals into the acid with a blender just before going down hole. Pressure up on the annulus and monitor it while pumping the acid treatment. Pump 30,000 gallons of gelled HCL at 35 BPM via 2.875" tubing at approximately 6500 psi. Over flush the well with 10,000 gallons of 2% KCl water and a friction reducer at 35 BPM or 8500 psi.

Treatment Requirements provided by YPC:
2 lined frac tanks for the acid.
1 regular frac tank with 12,000 gallons of 2% KCl water for flush and to test lines.

Acid Specifications:
**Bid 32,000 gallons of acid to allow for tank bottoms.**
Inhibitor for 135° F.
Cationic surfactant package
5 gal/M gelling agent.

4. Shut well in for 4 hours to allow the acid to spend. Open the well up and allow it to flow if it will. If the well will not flow swab the well in.

5. Flow test and evaluate the well for production equipment.

6. Turn the well over to the production department.

**Operations Engineering Supervisor** _____ **Date** 9/21/00

**Operations Manager** HBK **Date** 22500

Miek Hill
September 21, 2000
Mikeh\mydocuments\word\proposal\acid\Hinkle3H.doc

| | | | |
|---|---|---|---|
| xc: | Brian | Darrell | Stormi |
| | Pinson | Ron | Rusty |
| | Dyke(2) | | Engfile |
| | | | Geofile |

1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, 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 & Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised July 28, 2000

Submit to Appropriate District Office
5 Copies

# I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

| [1] Operator name and Address | [2] OGRID Number |
|---|---|
| **Yates Petroleum Corporation**<br>**105 South Fourth Street**<br>**Artesia NM 88210** | **025575** |
| | [3] Reason for Filing Code/ Effective Date<br>**Added lateral open hole completion to existing well** |

| [4] | | 6 Pool Code |
|---|---|---|
| **30-015-28415** | **N. Dagger Draw Upper Penn** | **15472** |
| [7] Property Code | [8] Property Name | [9] Well Number |
| **15487** | **Hinkle ALD** | **#3-II** |

II. [10] Surface Location

| Ul or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| H | 28 | 19S | 25E | | 1980 | North | 660 | East | Chaves |

[11] Bottom Hole Location

| Ul. or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 28 | 19S | 25E | | 1067 | North | 570 | East | Chaves |

| [12] Lse Code | [13] Producing Method Code | [14] Gas Connection Date | [15] C-129 Permit Number | [16] C-129 Effective Date | [17] C-129 Expiration Date |
|---|---|---|---|---|---|
| P | P | 9/29/00 | | | |

III. Oil and Gas Transporters

| [18] Transporter OGRID | [19] Transporter Name & Address | [20] POD | [21] O/G | [22] POD ULSTR Location and Description |
|---|---|---|---|---|
| 138648 | Amoco P/L Int. Trucking<br>502 N. West Avenue<br>Levelland, TX 79336 | 2813564 | O | Unit G – Section 28 T19S-R25E |
| 000734 | Amoco Pipeline Company<br>502 N. West Avenue<br>Levelland, TX 79336 | 2813564 | O | Unit G – Section 28 T19S-R25E |
| 025561 | Yates Petroleum Corporation<br>105 South Fourth Street<br>Artesia, NM 88210 | 2820609 | G | Unit H – Section 28 T19S-R25E |
| | | | | |

IV. Produced Water

| [23] POD | [24] POD ULSTR Location and Description |
|---|---|
| 2813566 | Unit G – Section 28 T19S-R25E |

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V. Well Completion Data

| [25] Spud Date | [26] Ready Date | [27] TD | [28] PBTD | [29] Perforations | [30] DHC, MC |
|---|---|---|---|---|---|
| 8/14/00 | 10/18/00 | 8612' MD<br>7675' TVD at bottom hole<br>7734' TVD at deepest point | 7763' MD<br>7730' TVD | Open Hole<br>7620-7763' MD<br>7618-7731' TVD | |

| [31] Hole Size | [32] Casing & Tubing Size | [33] Depth Set | [34] Sacks Cement |
|---|---|---|---|
| | | | |
| **No casing set in open hole lateral completion** | | | |
| | | | |
| | | | |
| | | | |
| | | | |

VI. Well Test Data

| [35] Date New Oil | [36] Gas Delivery Date | [37] Test Date | [38] Test Length | [39] Tbg. Pressure | [40] Csg. Pressure |
|---|---|---|---|---|---|
| 9/29/00 | 9/29/00 | 10/19/00 | 24 hrs. | | |
| [41] Choke Size | [42] Oil | [43] Water | [44] Gas | [45] AOF | [46] Test Method |
| | 21 | 1536 | 92 | | Pumping |

[47] I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: Susan Herpin

Printed name: **Susan Herpin**

Title: **Engineering Technician**

Date: **January 28, 2002** Phone: **505-748-1471**

OIL CONSERVATION DIVISION

Approved by: ORIGINAL SIGNED BY TIM W. GUM DISTRICT II SUPERVISOR

Title:

Approval Date: FEB 19 2002

ENTERED MAR 2 2 2002

# EXHIBIT B

**Yates Petroleum Corporation**
**Hinkle "ALD" #3-H**
**Surface 1,980' FNL & 660' FEL**
**Bottom Hole 1,956' FNL & 575' FEL**
**Section 28-T19S-R25E**
**Eddy County, New Mexico**