

6094 Jerry N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED

OMB NO. 1004-0136

Expires: February 28, 1995

SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.

LC 065357 065347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME, WELL NO.

Estill AD Federal No. 3 33619

9. API WELL NO.

30-015-34162

10. FIELD AND POOL, OR WILDCAT

White City; Penn 87280

11. SEC. T., R., M., BLOCK AND SURVEY

OR AREA

Sec. 19 T24S R26E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

1b. TYPE OF WELL

OIL ☐
WELL

GAS ☒
WELL

OTHER ☐
ZONE

SINGLE ☐
ZONE

MULTIPLE ☐
ZONE

2. NAME OF OPERATOR

Gruy Petroleum Management Co.

3. ADDRESS AND TELEPHONE NO.

P.O. Box 140907 Irving TX 75014 972-401-3111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

SHL 1470' FSL & 1939' FEL BHL 1670' FNL & 1900' FWL Sec 19-24S-26E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

17 miles South of Carlsbad

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, T.O.
(Also to nearest drlg. unit line, if any)

1470'

16. NO. OF ACRES IN LEASE

2318.08

17. NO. OF ACRES ASSIGNED
TO THIS WELL

640

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

340'

19. PROPOSED DEPTH

13000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3444' GR

CARLSBAD CONTROLLED WATER BASIN

22. APPROX. DATE WORK WILL START*
06-30-05

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	J-55 13 3/8"	54.5 #	200' WITNESS	490 sx circulate
12 1/4"	P-110/N-80 9 5/8"	40 #	1550' WITNESS	1200 sx circulate
7 7/8"	P-110 5 1/2"	17 #	13000'	1620 sx TOC 2700'

From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 - psi BOP system. We are requesting a variance for the 13 3/8" surface casing and BOP testing from Onshore Order No. 2, which states all casing strings below the conductor, shall be pressure tested to .22 psi per foot or 1500 # whichever is greater, but not to exceed 70% of the manufactures stated maximum internal yield. During the running of the surface pipe and the drilling of the intermediate hole we do not anticipate any pressures greater than 1000 # and are requesting a variance to test the 13 3/8" casing and BOP system to 1000 # psi, and use rig pumps instead of an independent service company.

IN ABOVE SPACE, DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24 SIGNED Zeno Farris TITLE Mgr. Ops. Admin DATE 05-04-05

(This space for Federal or State office use)

PERMIT No.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL: As/ Tony J. Herrell

APPROVED BY

TITLE

FIELD MANAGER

DATE

JUN 13 2005

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

29.5

APPROVAL FOR 1 YEAR

Signature _____



Gruy Petroleum Management Co.

600 East Las Colinas Blvd. • Suite 1100 • Irving, TX 75039 • (972) 401-3111 • Fax (972) 443-6450
Mailing Address: P.O. Box 140907 • Irving, TX 75014-0907

A wholly-owned subsidiary of Magnum Hunter Resources, Inc., a NYSE company MHR

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Bureau of Land Management
2909 West 2nd Street
Roswell New Mexico 88201-2019
Attn: Ms. Linda Askwig

Gruy Petroleum Management Co. accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land, or portion thereof, as described below:

Lease No.: LC - 065347

Legal Description: All Sec 19, T24S-R26E
Containing 640 acres, Eddy County New Mexico

Formation (S): Morrow/Pennsylvanian

Bond Coverage: Nationwide BLM Bond

BLM Bond File No.: NM 2575

Authorized Signature: Zeno Farris
Representing Gruy Petroleum Management Co.

Name: Zeno Farris

Title: Manager, Operations Administration

Date: 05/05/05

Application to Drill

Gruy Petroleum Management Co.
Estill AD Federal No. 3
Unit Letter J Section 19
T24S - R26E Eddy County, NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

- 1 Location: SHL 1470' FSL & 1939' FEL Sec. 19- 24S 26E
BHL 1670' FNL & 1900' FWL Sec. 19-24S-26E
- 2 Elevation above sea level: GR 3444'
- 3 Geologic name of surface formation: Quaternary Alluvium Deposits
- 4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5 Proposed drilling depth: 13000'

6 Estimated tops of geological markers:

T/Salt	200'	Cisco Canyon	9928
B/Salt	800'	Strawn	10078
Delaware	1500	Atoka	10388
Bone Spring	6168	Morrow	11,158
Wolfcamp	8098	Barnett	11,768

7 Possible mineral bearing formation:

Strawn	Gas
Atoka	Gas
Morrow	Gas

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
17 1/2"	0-200'	13 3/8"	54.5	8-R	ST&C	J-55
12 1/4"	0-1550'	9 5/8"	40	8-R	ST&C	P-110/N-80
7 7/8"	0-13000'	5 1/2"	17	8-R	ST&C	P-110

Application to Drill

Gruy Petroleum Management Co.
Estill AD Federal No. 3
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T24S - R26E Eddy County, NM

9 Cementing & Setting Depth:

13 3/8"	Surface	Set 200' of 13 3/8" J-55 54.5 ST&C casing. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 1550' of 9 5/8" P-110/N-80 40# ST&C casing or casing sufficient to reach the base of the reef complex. Cement in two stages, first stage cement with 1000 Sx. Of Class POZ/C Cement + additives, second stage cement with 200 Sx. Of Class "C" + additives, circulate cement to surface.
5 1/2"	Production	Set 13000' of 5 1/2" P-110 17# ST&C casing. Cement in two stages, first stage cement with 1020 Sx. of Class POZ/C Cement + additives. Second stage cement with 600 Sx of Class "C" Estimated top of cement 2700'.

10 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be nipped up on the 9 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 200'	8.4 - 8.6	30 - 32	May lose circ.	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
200' - 1530'	9.7 - 10.0	28 - 29	May lose circ	Fresh water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
1530' - 8300'	8.4 - 9.9	28 - 29	NC	Fresh water. Paper for seepage. Lime for pH (9 - 9.5)
8300' - 10000'	8.45 - 8.9	28 - 29	NC	Cut brine. Caustic for pH control.
10000' - 13000'	8.9 - 9.7	29 - 45	NC	XCD Polymer mud system.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

Application to Drill

Gruy Petroleum Management Co.
Estill AD Federal No. 3
Unit Letter J Section 19
T24S - R26E Eddy County, NM

12 Testing, Logging and Coring Program:

- A. Mud logging program: One-man unit from 8000' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DST's, or cores are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures or H2S gas are expected. Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 4000 PSI, estimated BHT 190.

14 Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 35 - 45 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Strawn / Morrow / Atoka pay will be perforated and stimulated. The well will be tested and potentialized as a gas well.

Surface Use Plan

Gruy Petroleum Management Co.
Estill AD Federal No. 3
Unit Letter J Section 19
T24S - R26E Eddy County, NM

- 1 Existing Roads: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.

- A. Exhibit "A" shows the proposed well site as staked.

- B. From the intersection of Hwy 62-180 and Eddy County road # 722. Go south on Co. Rd. 722 for 0.1 miles to a caliche road on the right. Turn right and go approx. 0.3 miles to a proposed road survey approx. 379' to location.

- 2 PLANNED ACCESS ROADS: 379' of access road will be constructed.

- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"

A. Water wells -	None known
B. Disposal wells -	None known
C. Drilling wells -	None known
D. Producing wells -	As shown on Exhibit "A"
E. Abandoned wells -	As shown on Exhibit "A"

Surface Use Plan

Gruy Petroleum Management Co.
Estill AD Federal No. 3
Unit Letter J Section 19
T24S - R26E Eddy County, NM

11 OTHER INFORMATION:

- A. Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- B. The wellsite is on surface owned by The United States Department of the Interior, Bureau of Land Management. The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.
- C. An Archaeological survey will be conducted on the location and proposed roads, and this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.
- D. Wes Ables house in the SW/4 of section 20 is within 1 1/2 miles of this location.

12 OPERATORS REPRESENTATIVE:

Gruy Petroleum Management Company
P.O. Box 14097
Irving, TX 75014
Office Phone: (972) 443-6489
Zeno Farris

- 13 **CERTIFICATION:** I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Gruy Petroleum Management Company and/or its contractors/subcontractors and is in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME: Zeno Farris

DATE: 5/5/2005

TITLE: Manager, Operations Administration

DISTRICT I

1625 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

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		White City; Penn (Gas)
Property Code	Property Name	Well Number
	ESTILL AD FEDERAL	3
OGRID No.	Operator Name	Elevation
162683	GRUY PETROLEUM MANAGEMENT COMPANY	3444'

Surface Location

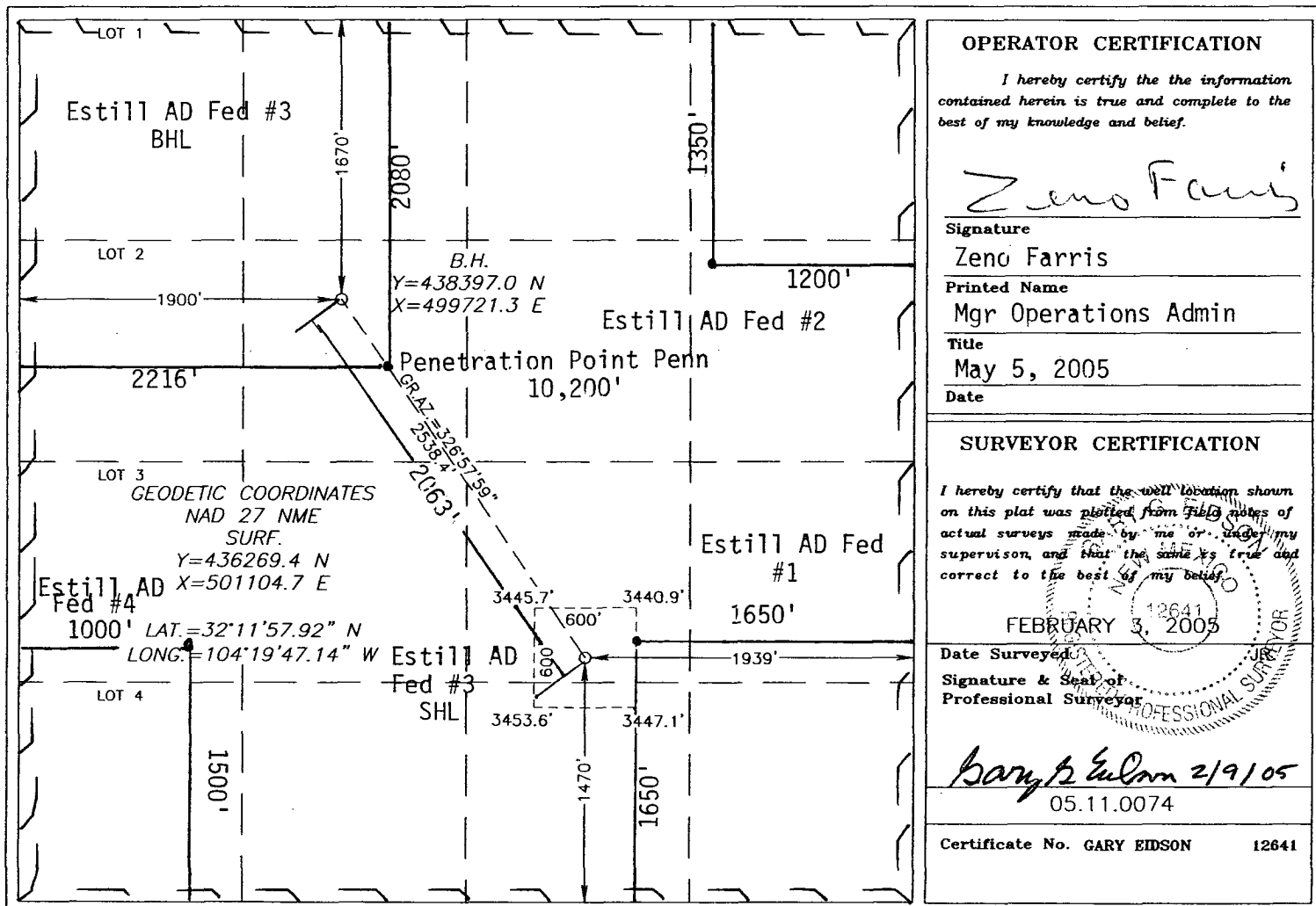
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	19	24-S	26-E		1470	SOUTH	1939	EAST	EDDY

Bottom Hole Location If Different From Surface

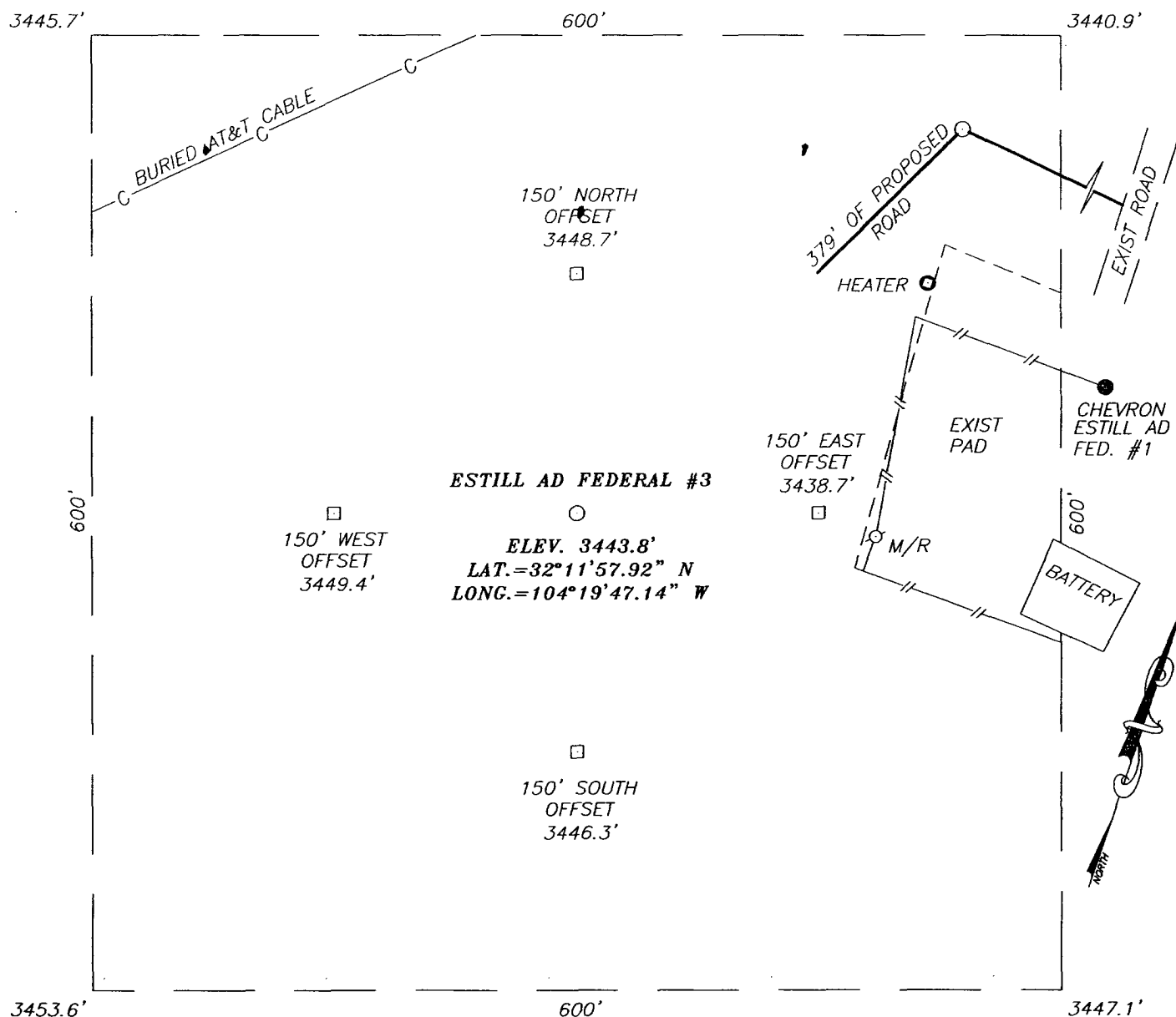
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	19	24-S	26-E		1670	NORTH	1900	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640	Y		

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

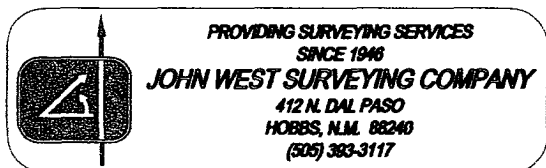
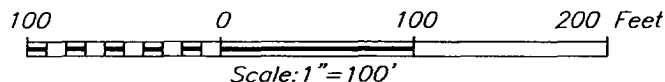


SECTION 19, TOWNSHIP 24 SOUTH, RANGE 26 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #62-180 AND CO. RD. #772 (MEANS RD.) GO SOUTH ON CO. RD. #772 FOR APPROX. 0.1 MILES TO A CALICHE ROAD ON THE RIGHT. TURN RIGHT AND GO APPROX. 0.3 MILES TO PROPOSED ROAD SURVEY. FOLLOW PROPOSED ROAD SURVEY APPROX. 379' TO PROPOSED LOCATION.



GRUY PETROLEUM MANAGEMENT COMPANY

ESTILL AD FEDERAL #3 WELL
 LOCATED 1470 FEET FROM THE SOUTH LINE
 AND 1939 FEET FROM THE EAST LINE OF SECTION 19,
 TOWNSHIP 24 SOUTH, RANGE 26 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 2/3/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.0074	Dr By: J.R.
Date: 2/8/05	Rev 1:N/A
Disk: CD#5	05110074
	Scale: 1"=100'

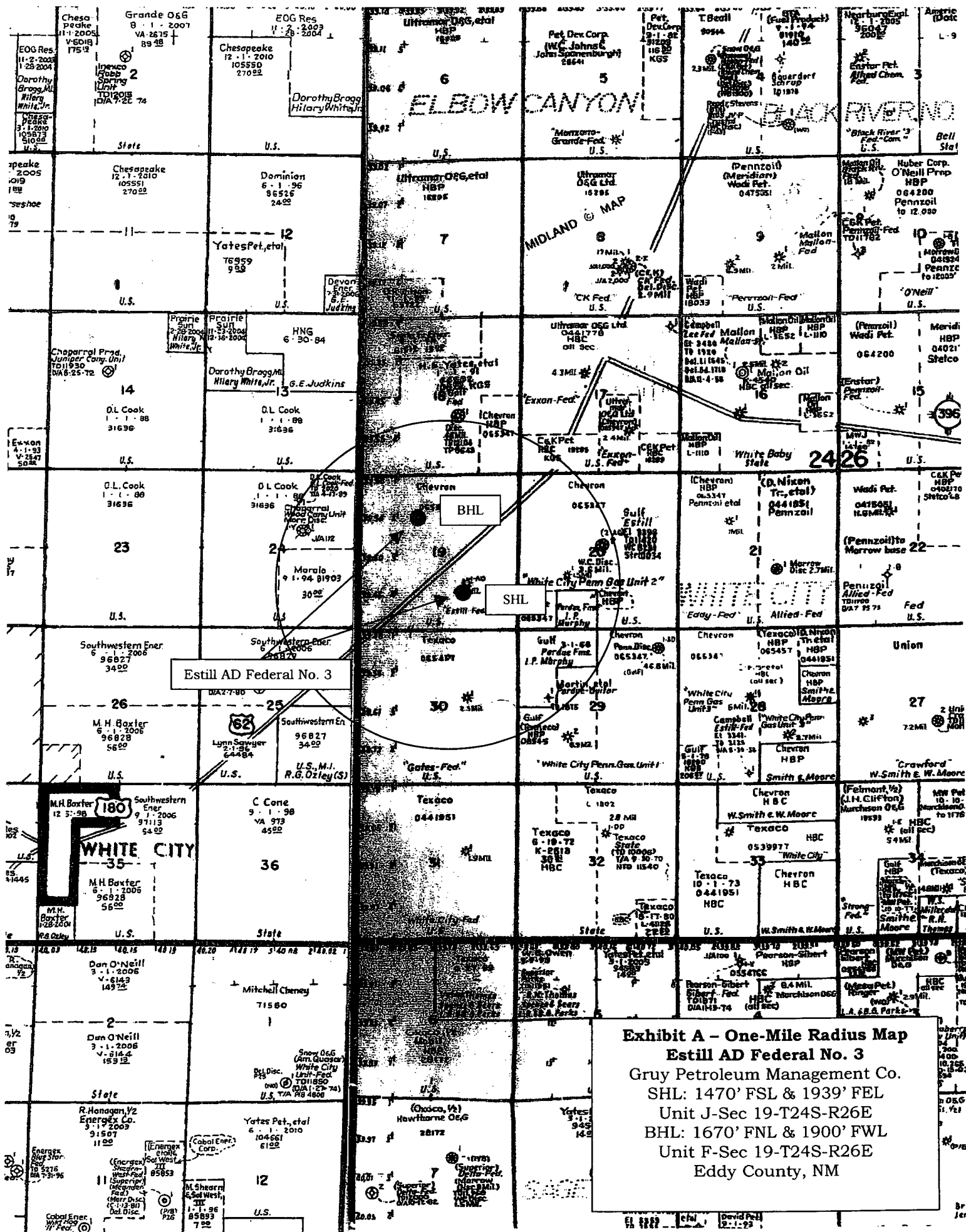
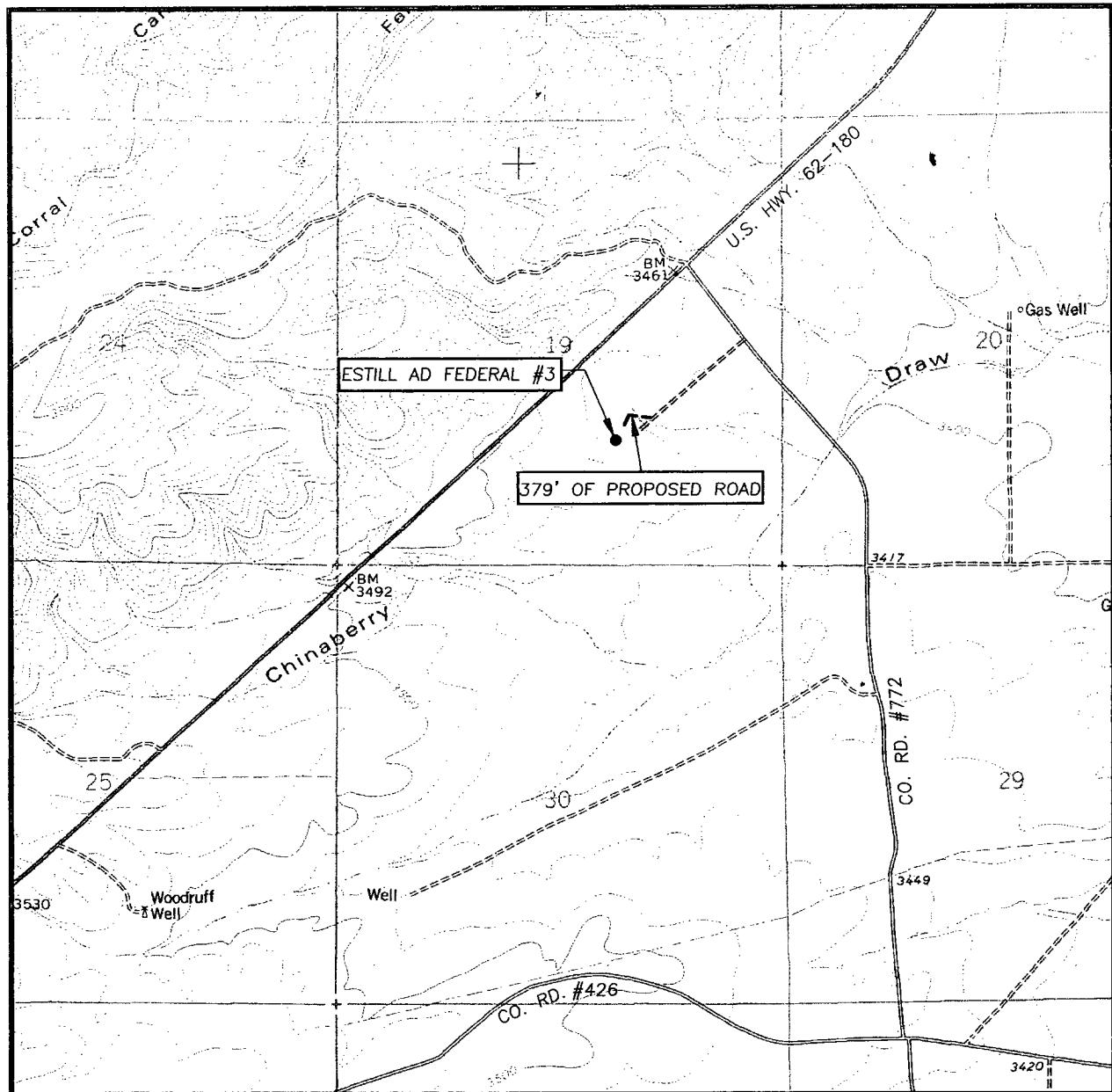


Exhibit A - One-Mile Radius Map
Estill AD Federal No. 3
Gruy Petroleum Management Co.
SHL: 1470' FSL & 1939' FEL
Unit J-Sec 19-T24S-R26E
BHL: 1670' FNL & 1900' FWL
Unit F-Sec 19-T24S-R26E
Eddy County, NM

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BLACK RIVER VILLAGE, N.M. - 20'

SEC. 19 TWP. 24-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1470' FSL & 1939' FEL

ELEVATION 3444'

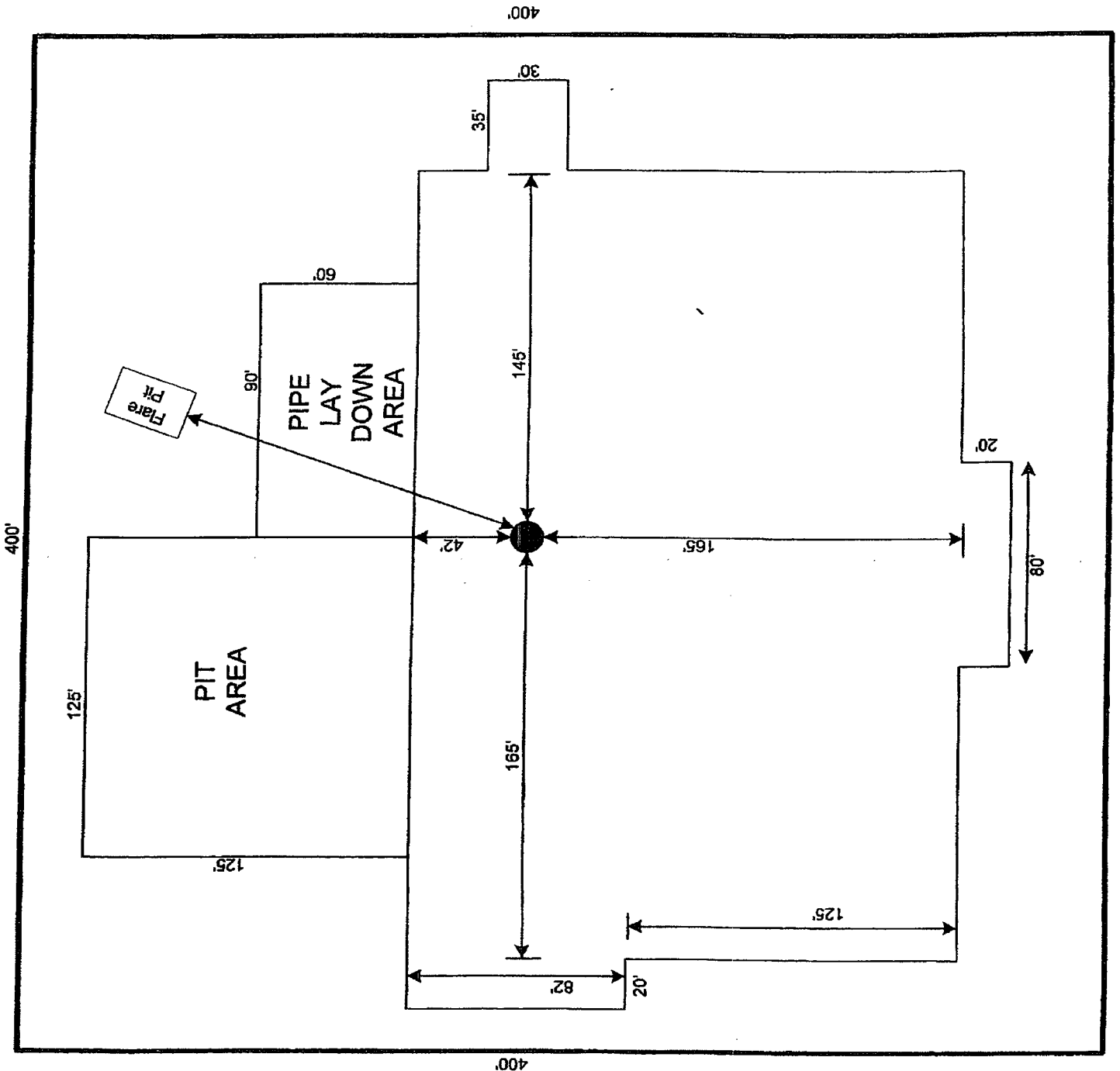
OPERATOR GRUY PETROLEUM
MANAGEMENT COMPANY

LEASE ESTILL AD FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
BLACK RIVER VILLAGE, N.M.



PROVIDING SURVEYING SERVICES
SINCE 1948
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 383-3117

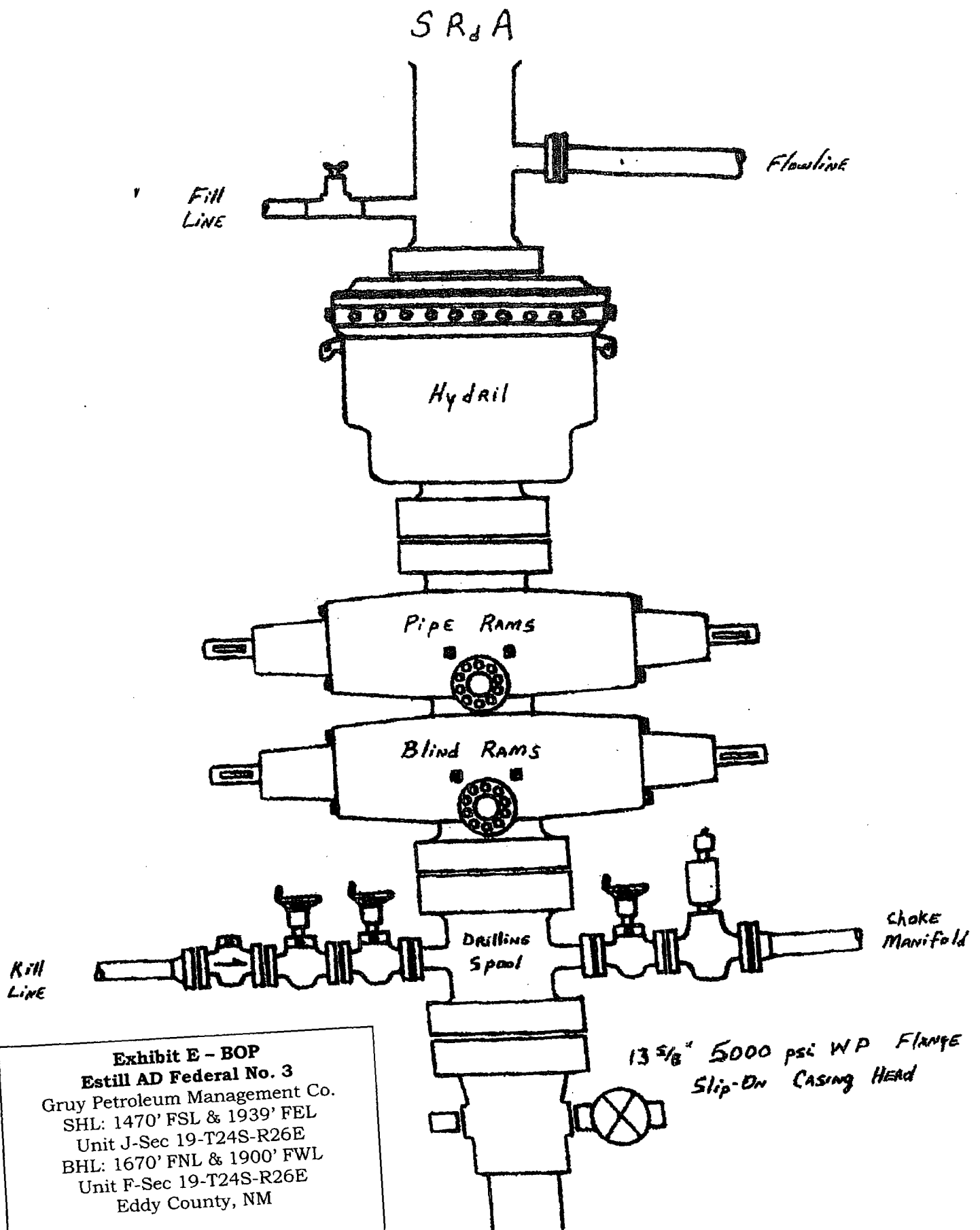


Rig 80

**GRUY PETROLEUM
MANAGEMENT COMPANY
IRVING TEXAS**

SCALE 1"=60'

Exhibit D - Rig Layout
Estill AD Federal No. 3
 Gruy Petroleum Management Co.
 SHL: 1470' FSL & 1939' FEL
 Unit J-Sec 19-T24S-R26E
 BHL: 1670' FNL & 1900' FWL
 Unit F-Sec 19-T24S-R26E
 Eddy County, NM



DRILLING OPERATIONS
CHOKE MANIFOLD
5M SERVICE

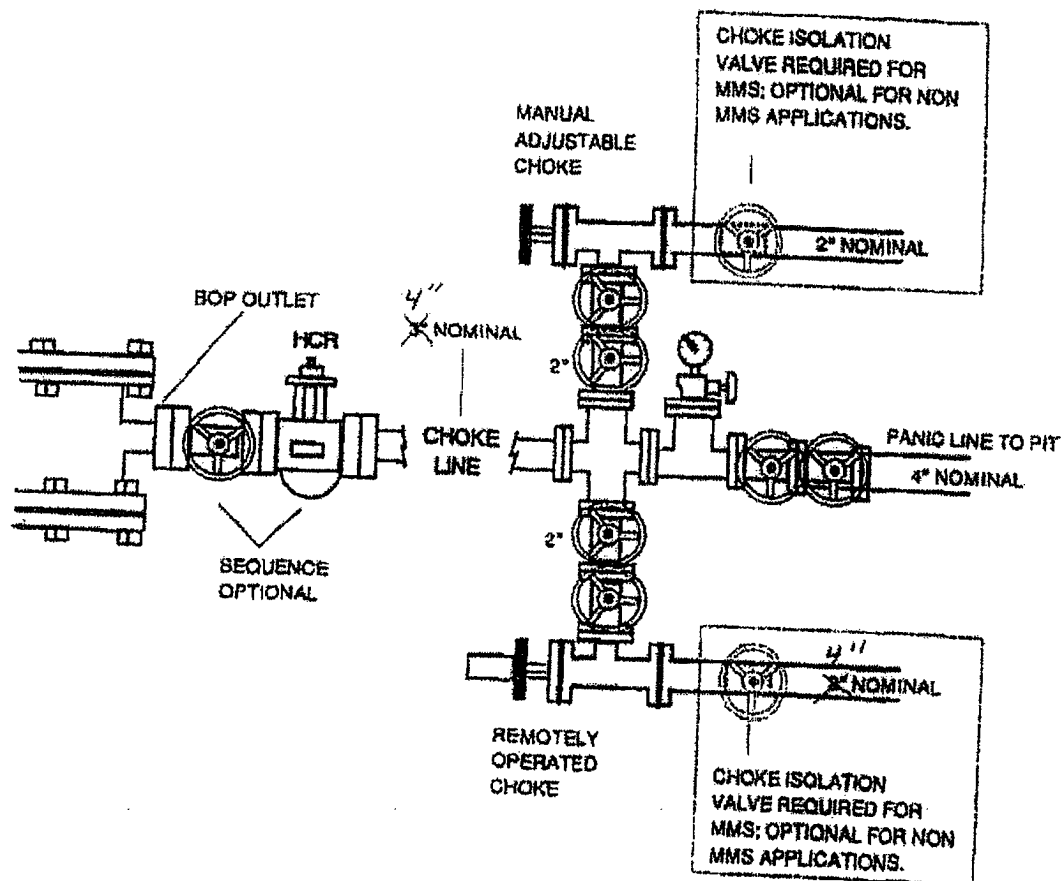


Exhibit E Cont'd - Choke Manifold

Estill AD Federal No. 3

Gruy Petroleum Management Co.

SHL: 1470' FSL & 1939' FEL

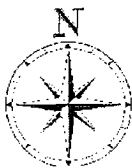
Unit J-Sec 19-T24S-R26E

BHL: 1670' FNL & 1900' FWL

Unit F-Sec 19-T24S-R26E

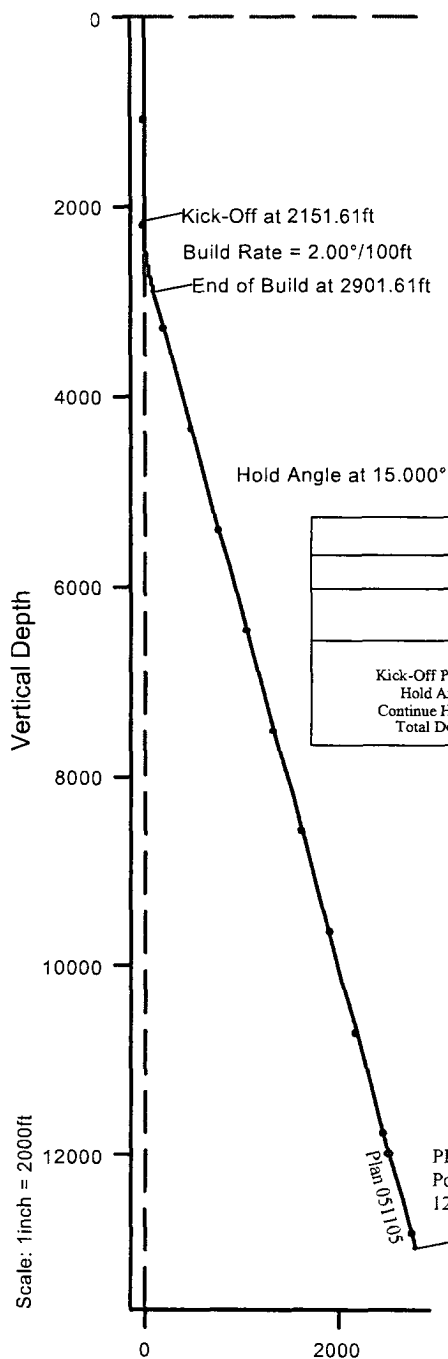
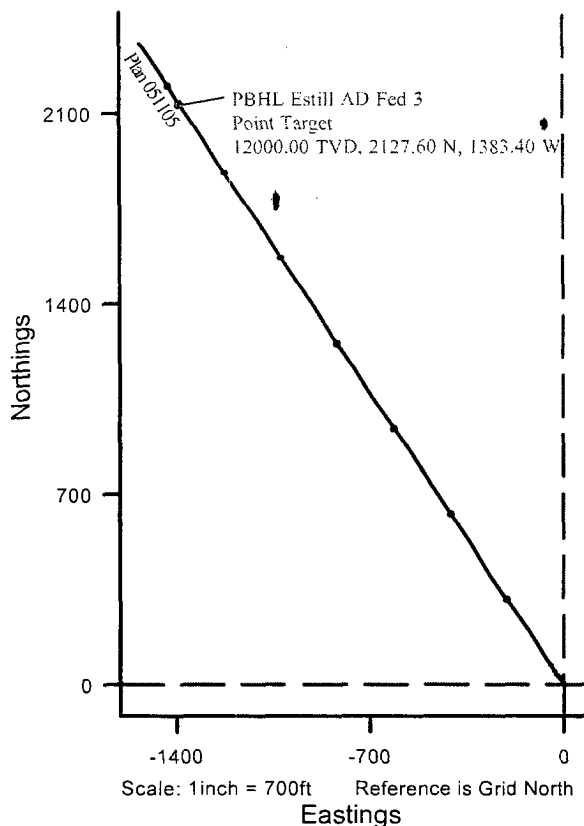
Eddy County, NM

New Mexico
Eddy County
Sec. 19-T24S-R26E
Estill AD Fed #3
Plan 051105



Estill AD Fed #3 Surface Location

RKB Elevation: 3444.00ft above Mean Sea Level
Ref. Wellhead: 1470.00 N, 1939.00 W
Ref. Global Coordinates: 436269.40 N, 501104.70 E
Ref. Geographical Coordinates: 32° 11' 57.9178" N, 104° 19' 47.1431" W



Hold Angle at 15.000°

Plan 051105 Proposal Data

Coordinate System : NAD27 New Mexico State Planes, Eastern Zone								
Measured Depth	Incl.	Azim.	Vertical Depth	Northings	Eastings	Vertical Section	Dogleg Rate	
Kick-Off Point	0.00	0.000	0.00	0.00 N	0.00 E	0.00	0.00	
Hold Angle	2151.61	0.000	2151.61	0.00 N	0.00 E	0.00	0.00	
Continue Hold	2901.61	15.000	2893.07	81.84 N	53.21 W	97.62	2.00	
Total Depth	12329.80	15.000	12000.00	2127.60 N	1383.40 W	2537.81	0.00	
	13365.07	15.000	13000.00	2352.24 N	1529.46 W	2805.76	0.00	

Plan 051105 Bottom Hole Location

Ref. RKB(3444'+20'KB): 13000.00ft
Ref. Ground Level: 12986.00ft
Ref. Mean Sea Level: 9556.00ft
Ref. Wellhead: 2352.24 N, 1529.46 W
Ref. Global Coordinates: 438621.64 N, 499575.24 E
Ref. Geographical Coordinates: 32° 12' 21.1967" N, 104° 20' 04.9439" W

Section Azimuth: 326.967° (Grid North)
Vertical Section

Prepared by:
Dennis Cook

Date/Time:
11 May, 2005 - 10:37

Checked:

Approved:



Gruy Petroleum Management Co.
New Mexico
Eddy County
Sec. 19-T24S-R26E
Estill AD Fed #3 - Plan 051105

Revised: 11 May, 2005

Haliburton Sperry-Drilling
Proposal Report

11 May, 2005

Data Source: Mr. Tom Strother
Surface Coordinates: 436269.40 N, 501104.70 E (32° 11' 57.9178" N, 104° 19' 47.1431" W)
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone

Surface Coordinates relative to Center of County: 109343.36 S, 1104.70 E (Grid)
Surface Coordinates relative to Wellhead: 1470.00 N, 1939.00 W (Grid)
Kelly Bushing Elevation: 3444.00ft above Mean Sea Level
Kelly Bushing Elevation: 14.00ft above Ground Level

Proposal Ref: pro8458

HALLIBURTON
Sperry Drilling Services

HALLIBURTON

Sperry Drilling Services

Gruy Petroleum Management Co.

New Mexico

Eddy County

Proposal Report for Sec. 19-T24S-R26E - Estill AD Fed #3 - Plan 051105**Data Source: Mr. Tom Strother****Revised: 11 May, 2005**

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S (ft)	E-W (ft)	Dogleg Severit (°/100ft)	Lease Calls FNL-FSL (ft)	FEL-FWL (ft)	Global Coordinates Grid Y (ft)	Grid X (ft)
0.00	0.000	0.000	0.00	0.00	0.00 N	0.00 E		1470.00 FSL	1939.00 FEL	436269.40 N	501104.70 E
Kick-Off at 2151.61ft											
2151.61	0.000	0.000	2151.61	0.00	0.00 N	0.00 E	0.00	1470.00 FSL	1939.00 FEL	436269.40 N	501104.70 E
2200.00	0.968	326.967	2200.00	0.41	0.34 N	0.22 W	2.00	1470.34 FSL	1939.22 FEL	436269.74 N	501104.48 E
2300.00	2.968	326.967	2299.93	3.84	3.22 N	2.09 W	2.00	1473.22 FSL	1941.09 FEL	436272.62 N	501102.61 E
2400.00	4.968	326.967	2399.69	10.76	9.02 N	5.87 W	2.00	1479.02 FSL	1944.87 FEL	436278.42 N	501098.83 E
2500.00	6.968	326.967	2499.14	21.16	17.74 N	11.53 W	2.00	1487.74 FSL	1950.53 FEL	436287.14 N	501093.17 E
2600.00	8.968	326.967	2598.17	35.02	29.36 N	19.09 W	2.00	1499.36 FSL	1958.09 FEL	436298.76 N	501085.61 E
2700.00	10.968	326.967	2696.66	52.33	43.87 N	28.52 W	2.00	1513.87 FSL	1967.52 FEL	436313.27 N	501076.18 E
2800.00	12.968	326.967	2794.48	73.06	61.25 N	39.83 W	2.00	1531.25 FSL	1978.83 FEL	436330.65 N	501064.87 E
2900.00	14.968	326.967	2891.52	97.20	81.49 N	52.98 W	2.00	1551.49 FSL	1991.98 FEL	436350.89 N	501051.72 E
End of Build at 2901.61ft											
2901.61	15.000	326.967	2893.07	97.62	81.84 N	53.21 W	2.00	1551.84 FSL	1992.21 FEL	436351.24 N	501051.49 E
3000.00	15.000	326.967	2988.11	123.08	103.19 N	67.09 W	0.00	1573.19 FSL	2006.09 FEL	436372.59 N	501037.61 E
3100.00	15.000	326.967	3084.70	148.96	124.88 N	81.20 W	0.00	1594.88 FSL	2020.20 FEL	436394.28 N	501023.50 E
3200.00	15.000	326.967	3181.29	174.84	146.58 N	95.31 W	0.00	1616.58 FSL	2034.31 FEL	436415.98 N	501009.39 E
3300.00	15.000	326.967	3277.89	200.73	168.28 N	109.42 W	0.00	1638.28 FSL	2048.42 FEL	436437.68 N	500995.28 E
3400.00	15.000	326.967	3374.48	226.61	189.98 N	123.53 W	0.00	1659.98 FSL	2062.53 FEL	436459.38 N	500981.17 E
3500.00	15.000	326.967	3471.07	252.49	211.68 N	137.64 W	0.00	1681.68 FSL	2076.64 FEL	436481.08 N	500967.06 E
3600.00	15.000	326.967	3567.66	278.37	233.38 N	151.75 W	0.00	1703.38 FSL	2090.75 FEL	436502.78 N	500952.95 E
3700.00	15.000	326.967	3664.26	304.25	255.07 N	165.85 W	0.00	1725.07 FSL	2104.85 FEL	436524.47 N	500938.85 E
3800.00	15.000	326.967	3760.85	330.14	276.77 N	179.96 W	0.00	1746.77 FSL	2118.96 FEL	436546.17 N	500924.74 E

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
					N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
3900.00	15.000	326.967	3857.44	356.02	298.47 N	194.07 W	0.00	1768.47 FSL	2133.07 FEL	436567.87 N	500910.63 E
4000.00	15.000	326.967	3954.04	381.90	320.17 N	208.18 W	0.00	1790.17 FSL	2147.18 FEL	436589.57 N	500896.52 E
4100.00	15.000	326.967	4050.63	407.78	341.87 N	222.29 W	0.00	1811.87 FSL	2161.29 FEL	436611.27 N	500882.41 E
4200.00	15.000	326.967	4147.22	433.66	363.57 N	236.40 W	0.00	1833.57 FSL	2175.40 FEL	436632.97 N	500868.30 E
4300.00	15.000	326.967	4243.81	459.55	385.26 N	250.51 W	0.00	1855.26 FSL	2189.51 FEL	436654.66 N	500854.19 E
4400.00	15.000	326.967	4340.41	485.43	406.96 N	264.61 W	0.00	1876.96 FSL	2203.61 FEL	436676.36 N	500840.09 E
4500.00	15.000	326.967	4437.00	511.31	428.66 N	278.72 W	0.00	1898.66 FSL	2217.72 FEL	436698.06 N	500825.98 E
4600.00	15.000	326.967	4533.59	537.19	450.36 N	292.83 W	0.00	1920.36 FSL	2231.83 FEL	436719.76 N	500811.87 E
4700.00	15.000	326.967	4630.18	563.07	472.06 N	306.94 W	0.00	1942.06 FSL	2245.94 FEL	436741.46 N	500797.76 E
4800.00	15.000	326.967	4726.78	588.96	493.76 N	321.05 W	0.00	1963.76 FSL	2260.05 FEL	436763.16 N	500783.65 E
4900.00	15.000	326.967	4823.37	614.84	515.46 N	335.16 W	0.00	1985.46 FSL	2274.16 FEL	436784.86 N	500769.54 E
5000.00	15.000	326.967	4919.96	640.72	537.15 N	349.27 W	0.00	2007.15 FSL	2288.27 FEL	436806.55 N	500755.43 E
5100.00	15.000	326.967	5016.55	666.60	558.85 N	363.37 W	0.00	2028.85 FSL	2302.37 FEL	436828.25 N	500741.33 E
5200.00	15.000	326.967	5113.15	692.48	580.55 N	377.48 W	0.00	2050.55 FSL	2316.48 FEL	436849.95 N	500727.22 E
5300.00	15.000	326.967	5209.74	718.36	602.25 N	391.59 W	0.00	2072.25 FSL	2330.59 FEL	436871.65 N	500713.11 E
5400.00	15.000	326.967	5306.33	744.25	623.95 N	405.70 W	0.00	2093.95 FSL	2344.70 FEL	436893.35 N	500699.00 E
5500.00	15.000	326.967	5402.92	770.13	645.65 N	419.81 W	0.00	2115.65 FSL	2358.81 FEL	436915.05 N	500684.89 E
5600.00	15.000	326.967	5499.52	796.01	667.34 N	433.92 W	0.00	2137.34 FSL	2372.92 FEL	436936.74 N	500670.78 E
5700.00	15.000	326.967	5596.11	821.89	689.04 N	448.03 W	0.00	2159.04 FSL	2387.03 FEL	436958.44 N	500656.67 E
5800.00	15.000	326.967	5692.70	847.77	710.74 N	462.14 W	0.00	2180.74 FSL	2401.14 FEL	436980.14 N	500642.56 E
5900.00	15.000	326.967	5789.29	873.66	732.44 N	476.24 W	0.00	2202.44 FSL	2415.24 FEL	437001.84 N	500628.46 E
6000.00	15.000	326.967	5885.89	899.54	754.14 N	490.35 W	0.00	2224.14 FSL	2429.35 FEL	437023.54 N	500614.35 E
6100.00	15.000	326.967	5982.48	925.42	775.84 N	504.46 W	0.00	2245.84 FSL	2443.46 FEL	437045.24 N	500600.24 E
6200.00	15.000	326.967	6079.07	951.30	797.53 N	518.57 W	0.00	2267.53 FSL	2457.57 FEL	437066.93 N	500586.13 E
6300.00	15.000	326.967	6175.66	977.18	819.23 N	532.68 W	0.00	2289.23 FSL	2471.68 FEL	437088.63 N	500572.02 E
6400.00	15.000	326.967	6272.26	1003.07	840.93 N	546.79 W	0.00	2310.93 FSL	2485.79 FEL	437110.33 N	500557.91 E
6500.00	15.000	326.967	6368.85	1028.95	862.63 N	560.90 W	0.00	2332.63 FSL	2499.90 FEL	437132.03 N	500543.80 E
6600.00	15.000	326.967	6465.44	1054.83	884.33 N	575.00 W	0.00	2354.33 FSL	2514.00 FEL	437153.73 N	500529.70 E
6700.00	15.000	326.967	6562.03	1080.71	906.03 N	589.11 W	0.00	2376.03 FSL	2528.11 FEL	437175.43 N	500515.59 E
6800.00	15.000	326.967	6658.63	1106.59	927.72 N	603.22 W	0.00	2397.72 FSL	2542.22 FEL	437197.12 N	500501.48 E

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S (ft)	E-W (ft)	Dogleg Severit (°/100ft)	Lease Calls FNL-FSL (ft)	FEL-FWL (ft)	Global Coordinates Grid Y (ft)	Grid X (ft)
6900.00	15.000	326.967	6755.22	1132.48	949.42 N	617.33 W	0.00	2419.42 FSL	2556.33 FEL	437218.82 N	500487.37 E
7000.00	15.000	326.967	6851.81	1158.36	971.12 N	631.44 W	0.00	2441.12 FSL	2570.44 FEL	437240.52 N	500473.26 E
7100.00	15.000	326.967	6948.41	1184.24	992.82 N	645.55 W	0.00	2462.82 FSL	2584.55 FEL	437262.22 N	500459.15 E
7200.00	15.000	326.967	7045.00	1210.12	1014.52 N	659.66 W	0.00	2484.52 FSL	2598.66 FEL	437283.92 N	500445.04 E
7300.00	15.000	326.967	7141.59	1236.00	1036.22 N	673.76 W	0.00	2506.22 FSL	2612.76 FEL	437305.62 N	500430.94 E
7400.00	15.000	326.967	7238.18	1261.88	1057.91 N	687.87 W	0.00	2527.91 FSL	2626.87 FEL	437327.31 N	500416.83 E
7500.00	15.000	326.967	7334.78	1287.77	1079.61 N	701.98 W	0.00	2549.61 FSL	2640.98 FEL	437349.01 N *	500402.72 E
7600.00	15.000	326.967	7431.37	1313.65	1101.31 N	716.09 W	0.00	2571.31 FSL	2655.09 FEL	437370.71 N	500388.61 E
7700.00	15.000	326.967	7527.96	1339.53	1123.01 N	730.20 W	0.00	2593.01 FSL	2669.20 FEL	437392.41 N	500374.50 E
7800.00	15.000	326.967	7624.55	1365.41	1144.71 N	744.31 W	0.00	2614.71 FSL	2683.31 FEL	437414.11 N	500360.39 E
7900.00	15.000	326.967	7721.15	1391.29	1166.41 N	758.42 W	0.00	2636.41 FSL	2697.42 FEL	437435.81 N	500346.28 E
8000.00	15.000	326.967	7817.74	1417.18	1188.10 N	772.52 W	0.00	2658.10 FSL	2711.52 FEL	437457.50 N	500332.18 E
8100.00	15.000	326.967	7914.33	1443.06	1209.80 N	786.63 W	0.00	2679.80 FSL	2725.63 FEL	437479.20 N	500318.07 E
8200.00	15.000	326.967	8010.92	1468.94	1231.50 N	800.74 W	0.00	2701.50 FSL	2739.74 FEL	437500.90 N	500303.96 E
8300.00	15.000	326.967	8107.52	1494.82	1253.20 N	814.85 W	0.00	2723.20 FSL	2753.85 FEL	437522.60 N	500289.85 E
8400.00	15.000	326.967	8204.11	1520.70	1274.90 N	828.96 W	0.00	2744.90 FSL	2767.96 FEL	437544.30 N	500275.74 E
8500.00	15.000	326.967	8300.70	1546.59	1296.60 N	843.07 W	0.00	2766.60 FSL	2782.07 FEL	437566.00 N	500261.63 E
8600.00	15.000	326.967	8397.29	1572.47	1318.29 N	857.18 W	0.00	2788.29 FSL	2796.18 FEL	437587.69 N	500247.52 E
8700.00	15.000	326.967	8493.89	1598.35	1339.99 N	871.29 W	0.00	2809.99 FSL	2810.29 FEL	437609.39 N	500233.41 E
8800.00	15.000	326.967	8590.48	1624.23	1361.69 N	885.39 W	0.00	2831.69 FSL	2824.39 FEL	437631.09 N	500219.31 E
8900.00	15.000	326.967	8687.07	1650.11	1383.39 N	899.50 W	0.00	2853.39 FSL	2838.50 FEL	437652.79 N	500205.20 E
9000.00	15.000	326.967	8783.66	1676.00	1405.09 N	913.61 W	0.00	2875.09 FSL	2852.61 FEL	437674.49 N	500191.09 E
9100.00	15.000	326.967	8880.26	1701.88	1426.79 N	927.72 W	0.00	2896.79 FSL	2866.72 FEL	437696.19 N	500176.98 E
9200.00	15.000	326.967	8976.85	1727.76	1448.49 N	941.83 W	0.00	2918.49 FSL	2880.83 FEL	437717.89 N	500162.87 E
9300.00	15.000	326.967	9073.44	1753.64	1470.18 N	955.94 W	0.00	2940.18 FSL	2894.94 FEL	437739.58 N	500148.76 E
9400.00	15.000	326.967	9170.03	1779.52	1491.88 N	970.05 W	0.00	2961.88 FSL	2909.05 FEL	437761.28 N	500134.65 E
9500.00	15.000	326.967	9266.63	1805.40	1513.58 N	984.15 W	0.00	2983.58 FSL	2923.15 FEL	437782.98 N	500120.55 E
9600.00	15.000	326.967	9363.22	1831.29	1535.28 N	998.26 W	0.00	3005.28 FSL	2937.26 FEL	437804.68 N	500106.44 E
9700.00	15.000	326.967	9459.81	1857.17	1556.98 N	1012.37 W	0.00	3026.98 FSL	2951.37 FEL	437826.38 N	500092.33 E
9800.00	15.000	326.967	9556.40	1883.05	1578.68 N	1026.48 W	0.00	3048.68 FSL	2965.48 FEL	437848.08 N	500078.22 E

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
					N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
9900.00	15.000	326.967	9653.00	1908.93	1600.37 N	1040.59 W	0.00	3070.37 FSL	2979.59 FEL	437869.77 N	500064.11 E
10000.00	15.000	326.967	9749.59	1934.81	1622.07 N	1054.70 W	0.00	3092.07 FSL	2993.70 FEL	437891.47 N	500050.00 E
10100.00	15.000	326.967	9846.18	1960.70	1643.77 N	1068.81 W	0.00	3113.77 FSL	3007.81 FEL	437913.17 N	500035.89 E
10200.00	15.000	326.967	9942.78	1986.58	1665.47 N	1082.91 W	0.00	3135.47 FSL	3021.91 FEL	437934.87 N	500021.79 E
10300.00	15.000	326.967	10039.37	2012.46	1687.17 N	1097.02 W	0.00	3157.17 FSL	3036.02 FEL	437956.57 N	500007.68 E
10400.00	15.000	326.967	10135.96	2038.34	1708.87 N	1111.13 W	0.00	3178.87 FSL	3050.13 FEL	437978.27 N	499993.57 E
10500.00	15.000	326.967	10232.55	2064.22	1730.56 N	1125.24 W	0.00	3200.56 FSL	3064.24 FEL	437999.96 N	499979.46 E
10600.00	15.000	326.967	10329.15	2090.11	1752.26 N	1139.35 W	0.00	3222.26 FSL	3078.35 FEL	438021.66 N	499965.35 E
10700.00	15.000	326.967	10425.74	2115.99	1773.96 N	1153.46 W	0.00	3243.96 FSL	3092.46 FEL	438043.36 N	499951.24 E
10800.00	15.000	326.967	10522.33	2141.87	1795.66 N	1167.57 W	0.00	3265.66 FSL	3106.57 FEL	438065.06 N	499937.13 E
10900.00	15.000	326.967	10618.92	2167.75	1817.36 N	1181.68 W	0.00	3287.36 FSL	3120.68 FEL	438086.76 N	499923.02 E
11000.00	15.000	326.967	10715.52	2193.63	1839.06 N	1195.78 W	0.00	3309.06 FSL	3134.78 FEL	438108.46 N	499908.92 E
11100.00	15.000	326.967	10812.11	2219.51	1860.75 N	1209.89 W	0.00	3330.75 FSL	3148.89 FEL	438130.15 N	499894.81 E
11200.00	15.000	326.967	10908.70	2245.40	1882.45 N	1224.00 W	0.00	3352.45 FSL	3163.00 FEL	438151.85 N	499880.70 E
11300.00	15.000	326.967	11005.29	2271.28	1904.15 N	1238.11 W	0.00	3374.15 FSL	3177.11 FEL	438173.55 N	499866.59 E
11400.00	15.000	326.967	11101.89	2297.16	1925.85 N	1252.22 W	0.00	3395.85 FSL	3191.22 FEL	438195.25 N	499852.48 E
11500.00	15.000	326.967	11198.48	2323.04	1947.55 N	1266.33 W	0.00	3417.55 FSL	3205.33 FEL	438216.95 N	499838.37 E
11600.00	15.000	326.967	11295.07	2348.92	1969.25 N	1280.44 W	0.00	3439.25 FSL	3219.44 FEL	438238.65 N	499824.26 E
11700.00	15.000	326.967	11391.66	2374.81	1990.94 N	1294.54 W	0.00	3460.94 FSL	3233.54 FEL	438260.34 N	499810.16 E
11800.00	15.000	326.967	11488.26	2400.69	2012.64 N	1308.65 W	0.00	3482.64 FSL	3247.65 FEL	438282.04 N	499796.05 E
11900.00	15.000	326.967	11584.85	2426.57	2034.34 N	1322.76 W	0.00	3504.34 FSL	3261.76 FEL	438303.74 N	499781.94 E
12000.00	15.000	326.967	11681.44	2452.45	2056.04 N	1336.87 W	0.00	3526.04 FSL	3275.87 FEL	438325.44 N	499767.83 E
12100.00	15.000	326.967	11778.03	2478.33	2077.74 N	1350.98 W	0.00	3547.74 FSL	3289.98 FEL	438347.14 N	499753.72 E
12200.00	15.000	326.967	11874.63	2504.22	2099.44 N	1365.09 W	0.00	3569.44 FSL	3304.09 FEL	438368.84 N	499739.61 E
12300.00	15.000	326.967	11971.22	2530.10	2121.13 N	1379.20 W	0.00	3591.13 FSL	3318.20 FEL	438390.53 N	499725.50 E
Target - PBHL Estill AD Fed 3, Current Target											
12329.80	15.000	326.967	12000.00	2537.81	2127.60 N	1383.40 W	0.00	3597.60 FSL	3322.40 FEL	438397.00 N	499721.30 E
12400.00	15.000	326.967	12067.81	2555.98	2142.83 N	1393.30 W	0.00	3612.83 FSL	3332.30 FEL	438412.23 N	499711.40 E
12500.00	15.000	326.967	12164.40	2581.86	2164.53 N	1407.41 W	0.00	3634.53 FSL	3346.41 FEL	438433.93 N	499697.29 E
12600.00	15.000	326.967	12261.00	2607.74	2186.23 N	1421.52 W	0.00	3656.23 FSL	3360.52 FEL	438455.63 N	499683.18 E
12700.00	15.000	326.967	12357.59	2633.63	2207.93 N	1435.63 W	0.00	3677.93 FSL	3374.63 FEL	438477.33 N	499669.07 E

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
					N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
12800.00	15.000	326.967	12454.18	2659.51	2229.63 N	1449.74 W	0.00	3699.63 FSL	3388.74 FEL	438499.03 N	499654.96 E
12900.00	15.000	326.967	12550.78	2685.39	2251.33 N	1463.85 W	0.00	3721.33 FSL	3402.85 FEL	438520.73 N	499640.85 E
13000.00	15.000	326.967	12647.37	2711.27	2273.02 N	1477.96 W	0.00	3743.02 FSL	3416.96 FEL	438542.42 N	499626.74 E
13100.00	15.000	326.967	12743.96	2737.15	2294.72 N	1492.07 W	0.00	3764.72 FSL	3431.07 FEL	438564.12 N	499612.63 E
13200.00	15.000	326.967	12840.55	2763.03	2316.42 N	1506.17 W	0.00	3786.42 FSL	3445.17 FEL	438585.82 N	499598.53 E
13300.00	15.000	326.967	12937.15	2788.92	2338.12 N	1520.28 W	0.00	3808.12 FSL	3459.28 FEL	438607.52 N	499584.42 E
Total Depth at 13365.07ft											
13365.07	15.000	326.967	13000.00	2805.76	2352.24 N	1529.46 W	0.00	3822.24 FSL	3468.46 FEL	438621.64 N	499575.24 E

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to RKB(3444' +20' KB). Northings and Eastings are relative to Wellhead.

Based upon Minimum Curvature type calculations, at a Measured Depth of 13365.07ft.,
The Bottom Hole Displacement is 2805.76ft., in the Direction of 326.967° (Grid).

Proposal Report for Sec. 19-T24S-R26E - Estill AD Fed #3 - Plan 051105
 Data Source: Mr. Tom Strother
 Revised: 11 May, 2005

Comments

Measured Depth (ft)	Station Coordinates			Comment
	TVD (ft)	Northings (ft)	Eastings (ft)	
2151.61	2151.61	0.00 N	0.00 E	Kick-Off at 2151.61ft
2901.61	2893.07	81.84 N	53.21 W	End of Build at 2901.61ft
13365.07	13000.00	2352.24 N	1529.46 W	Total Depth at 13365.07ft

Targets associated with this wellpath

Target Name	Target Entry Coordinates			Target Shape	Target Type
	TVD (ft)	Northings (ft)	Eastings (ft)		
PBHL Estill AD Fed 3	12000.00	2127.60 N	1383.40 W	Point	Current Target
	8556.00	438397.00 N	499721.30 E		
		32° 12' 18.9736" N	104° 20' 03.2438" W		
	Mean Sea Level/Global Coordinates: Geographical Coordinates:				

North Reference Sheet for Sec. 19-T24S-R26E - Estill AD Fed #3

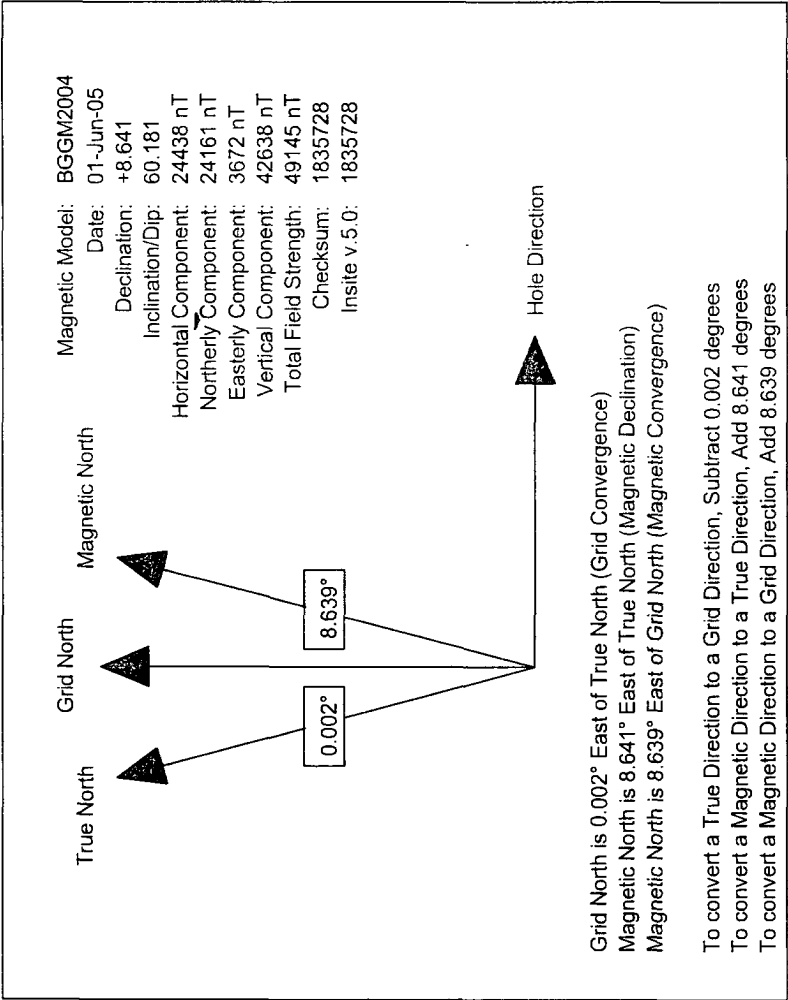
Coordinate System is NAD27 New Mexico State Planes, Eastern Zone, US Foot
Source: Snyder, J.P., 1987, Map Projections - A Working Manual

Datum is North American Datum of 1927 (US48, AK, HI, and Canada)

Spheroid is Clarke - 1866
Equatorial Radius: 6378206.400m.
Polar Radius: 6356583.800m.
Inverse Flattening: 294.978698213901

Projection method is Transverse Mercator or Gauss Kruger Projection
Central Meridian is -104.333°
Longitude Origin: 0.000°
Latitude Origin: 31.000°
False Easting: 152400.00m
False Northing: 0.00m
Scale Reduction: 0.99990909

Grid Coordinates of Well: 436269.40 N, 501104.70 E
Geographical Coordinates of Well: 32° 11' 57.9178" N, 104° 19' 47.1431" W
Surface Elevation of Well: 3444.00ft
Grid Convergence at Surface is +0.002°
Magnetic Convergence at Surface is -8.639° (1 June, 2005)



Halliburton Sperry-Sun

Gruy Petroleum Management Co.
Estill AD Fed #3 - Plan 051105

New Mexico
Eddy County
Sec. 19-T24S-R26E
Data Source: Mr. Tom Strother

Meas.		Sub-Sea	Vert.	Local	Local	Global	Global	Vert.	Dogleg
0	0	0	-3444	0	0.00 N	0.00 E	436269.4	501104.7	0
2151.61	0	0	-1292.39	2151.61	0.00 N	0.00 E	436269.4	501104.7	0 Kick-Off at 2151.61ft
2200	0.968	326.967	-1244	2200	0.34 N	0.22 W	436269.7	501104.4	0.41
2300	2.968	326.967	-1144.07	2299.93	3.22 N	2.09 W	436272.6	501102.6	3.84
2400	4.968	326.967	-1044.31	2399.69	9.02 N	5.87 W	436278.4	501098.8	10.76
2500	6.968	326.967	-944.86	2499.14	17.74 N	11.53 W	436287.1	501093.1	21.16
2600	8.968	326.967	-845.83	2598.17	29.36 N	19.09 W	436298.7	501085.6	35.02
2700	10.968	326.967	-747.34	2696.66	43.87 N	28.52 W	436313.2	501076.1	52.33
2800	12.968	326.967	-649.52	2794.48	61.25 N	39.83 W	436330.6	501064.8	73.06
2900	14.968	326.967	-552.48	2891.52	81.49 N	52.98 W	436350.8	501051.7	97.2
2901.61	15	326.967	-550.93	2893.07	81.84 N	53.21 W	436351.2	501051.4	97.62
3000	15	326.967	-455.89	2988.11	103.19 N	67.09 W	436372.5	501037.6	123.08
3100	15	326.967	-359.3	3084.7	124.88 N	81.20 W	436394.2	501023.5	148.96
3200	15	326.967	-262.71	3181.29	146.58 N	95.31 W	436415.9	501009.3	174.84
3300	15	326.967	-166.11	3277.89	168.28 N	109.42 W	436437.6	500995.2	200.73
3400	15	326.967	-69.52	3374.48	189.98 N	123.53 W	436459.3	500981.1	226.61
3500	15	326.967	27.07	3471.07	211.68 N	137.64 W	436481.0	500967.0	252.49
3600	15	326.967	123.66	3567.66	233.38 N	151.75 W	436502.7	500952.9	278.37
3700	15	326.967	220.26	3664.26	255.07 N	165.85 W	436524.4	500938.8	304.25
3800	15	326.967	316.85	3760.85	276.77 N	179.96 W	436546.1	500924.7	330.14
3900	15	326.967	413.44	3857.44	298.47 N	194.07 W	436567.8	500910.6	356.02
4000	15	326.967	510.04	3954.04	320.17 N	208.18 W	436589.5	500896.5	381.9
4100	15	326.967	606.63	4050.63	341.87 N	222.29 W	436611.2	500882.4	407.78
4200	15	326.967	703.22	4147.22	363.57 N	236.40 W	436632.9	500868.3	433.66
4300	15	326.967	799.81	4243.81	385.26 N	250.51 W	436654.6	500854.1	459.55
4400	15	326.967	896.41	4340.41	406.96 N	264.61 W	436676.3	500840.0	485.43
4500	15	326.967	993	4437	428.66 N	278.72 W	436698.0	500825.9	511.31
4600	15	326.967	1089.59	4533.59	450.36 N	292.83 W	436719.7	500811.8	537.19
4700	15	326.967	1186.18	4630.18	472.06 N	306.94 W	436741.4	500797.7	563.07
4800	15	326.967	1282.78	4726.78	493.76 N	321.05 W	436763.1	500783.6	588.96
4900	15	326.967	1379.37	4823.37	515.46 N	335.16 W	436784.8	500769.5	614.84
5000	15	326.967	1475.96	4919.96	537.15 N	349.27 W	436806.5	500755.4	640.72
5100	15	326.967	1572.55	5016.55	558.85 N	363.37 W	436828.2	500741.3	666.6
5200	15	326.967	1669.15	5113.15	580.55 N	377.48 W	436849.9	500727.2	692.48
5300	15	326.967	1765.74	5209.74	602.25 N	391.59 W	436871.6	500713.1	718.36
5400	15	326.967	1862.33	5306.33	623.95 N	405.70 W	436893.3	500699.0	744.25
5500	15	326.967	1958.92	5402.92	645.65 N	419.81 W	436915.0	500684.8	770.13
5600	15	326.967	2055.52	5499.52	667.34 N	433.92 W	436936.7	500670.7	796.01
5700	15	326.967	2152.11	5596.11	689.04 N	448.03 W	436958.4	500656.6	821.89
5800	15	326.967	2248.7	5692.7	710.74 N	462.14 W	436980.1	500642.5	847.77
5900	15	326.967	2345.29	5789.29	732.44 N	476.24 W	437001.8	500628.4	873.66
6000	15	326.967	2441.89	5885.89	754.14 N	490.35 W	437023.5	500614.3	899.54
6100	15	326.967	2538.48	5982.48	775.84 N	504.46 W	437045.2	500600.2	925.42
6200	15	326.967	2635.07	6079.07	797.53 N	518.57 W	437066.9	500586.1	951.3
6300	15	326.967	2731.66	6175.66	819.23 N	532.68 W	437088.6	500572.0	977.18
6400	15	326.967	2828.26	6272.26	840.93 N	546.79 W	437110.3	500557.9	1003.07
6500	15	326.967	2924.85	6368.85	862.63 N	560.90 W	437132.0	500543.8	1028.95
6600	15	326.967	3021.44	6465.44	884.33 N	575.00 W	437153.7	500529.7	1054.83
6700	15	326.967	3118.03	6562.03	906.03 N	589.11 W	437175.4	500515.5	1080.71
6800	15	326.967	3214.63	6658.63	927.72 N	603.22 W	437197.1	500501.4	1106.59
6900	15	326.967	3311.22	6755.22	949.42 N	617.33 W	437218.8	500487.3	1132.48
7000	15	326.967	3407.81	6851.81	971.12 N	631.44 W	437240.5	500473.2	1158.36
7100	15	326.967	3504.41	6948.41	992.82 N	645.55 W	437262.2	500459.1	1184.24
7200	15	326.967	3601	7045	1014.52	659.66 W	437283.9	500445.0	1210.12
7300	15	326.967	3697.59	7141.59	1036.22	673.76 W	437305.6	500430.9	1236
7400	15	326.967	3794.18	7238.18	1057.91	687.87 W	437327.3	500416.8	1261.88
7500	15	326.967	3890.78	7334.78	1079.61	701.98 W	437349.0	500402.7	1287.77
7600	15	326.967	3987.37	7431.37	1101.31	716.09 W	437370.7	500388.6	1313.65
7700	15	326.967	4083.96	7527.96	1123.01	730.20 W	437392.4	500374.5	1339.53
7800	15	326.967	4180.55	7624.55	1144.71	744.31 W	437414.1	500360.3	1365.41
7900	15	326.967	4277.15	7721.15	1166.41	758.42 W	437435.8	500346.2	1391.29
8000	15	326.967	4373.74	7817.74	1188.10	772.52 W	437457.5	500332.1	1417.18
8100	15	326.967	4470.33	7914.33	1209.80	786.63 W	437479.2	500318.0	1443.06
8200	15	326.967	4566.92	8010.92	1231.50	800.74 W	437500.9	500303.9	1468.94
8300	15	326.967	4663.52	8107.52	1253.20	814.85 W	437522.6	500289.8	1494.82
8400	15	326.967	4760.11	8204.11	1274.90	828.96 W	437544.3	500275.7	1520.7
8500	15	326.967	4856.7	8300.7	1296.60	843.07 W	437566.0	500261.6	1546.59
8600	15	326.967	4953.29	8397.29	1318.29	857.18 W	437587.6	500247.5	1572.47
8700	15	326.967	5049.89	8493.89	1339.99	871.29 W	437609.3	500233.4	1598.35
8800	15	326.967	5146.48	8590.48	1361.69	885.39 W	437631.0	500219.3	1624.23
8900	15	326.967	5243.07	8687.07	1383.39	899.50 W	437652.7	500205.2	1650.11

9000	15	326.967	5339.66	8783.66	1405.09	913.61 W	437674.4	500191.0	1676	0
9100	15	326.967	5436.26	8880.26	1426.79	927.72 W	437696.1	500176.9	1701.88	0
9200	15	326.967	5532.85	8976.85	1448.49	941.83 W	437717.8	500162.8	1727.76	0
9300	15	326.967	5629.44	9073.44	1470.18	955.94 W	437739.5	500148.7	1753.64	0
9400	15	326.967	5726.03	9170.03	1491.88	970.05 W	437761.2	500134.6	1779.52	0
9500	15	326.967	5822.63	9266.63	1513.58	984.15 W	437782.9	500120.5	1805.4	0
9600	15	326.967	5919.22	9363.22	1535.28	998.26 W	437804.6	500106.4	1831.29	0
9700	15	326.967	6015.81	9459.81	1556.98	1012.37	437826.3	500092.3	1857.17	0
9800	15	326.967	6112.4	9556.4	1578.68	1026.48	437848.0	500078.2	1883.05	0
9900	15	326.967	6209	9653	1600.37	1040.59	437869.7	500064.1	1908.93	0
10000	15	326.967	6305.59	9749.59	1622.07	1054.70	437891.4	500050.0	1934.81	0
10100	15	326.967	6402.18	9846.18	1643.77	1068.81	437913.1	500035.8	1960.7	0
10200	15	326.967	6498.78	9942.78	1665.47	1082.91	437934.8	500021.7	1986.58	0
10300	15	326.967	6595.37	10039.37	1687.17	1097.02	437956.5	500007.6	2012.46	0
10400	15	326.967	6691.96	10135.96	1708.87	1111.13	437978.2	499993.5	2038.34	0
10500	15	326.967	6788.55	10232.55	1730.56	1125.24	437999.9	499979.4	2064.22	0
10600	15	326.967	6885.15	10329.15	1752.26	1139.35	438021.6	499965.3	2090.11	0
10700	15	326.967	6981.74	10425.74	1773.96	1153.46	438043.3	499951.2	2115.99	0
10800	15	326.967	7078.33	10522.33	1795.66	1167.57	438065.0	499937.1	2141.87	0
10900	15	326.967	7174.92	10618.92	1817.36	1181.68	438086.7	499923.0	2167.75	0
11000	15	326.967	7271.52	10715.52	1839.06	1195.78	438108.4	499908.9	2193.63	0
11100	15	326.967	7368.11	10812.11	1860.75	1209.89	438130.1	499894.8	2219.52	0
11200	15	326.967	7464.7	10908.7	1882.45	1224.00	438151.8	499880.7	2245.4	0
11300	15	326.967	7561.29	11005.29	1904.15	1238.11	438173.5	499866.5	2271.28	0
11400	15	326.967	7657.89	11101.89	1925.85	1252.22	438195.2	499852.4	2297.16	0
11500	15	326.967	7754.48	11198.48	1947.55	1266.33	438216.9	499838.3	2323.04	0
11600	15	326.967	7851.07	11295.07	1969.25	1280.44	438238.6	499824.2	2348.92	0
11700	15	326.967	7947.66	11391.66	1990.94	1294.54	438260.3	499810.1	2374.81	0
11800	15	326.967	8044.26	11488.26	2012.64	1308.65	438282.0	499796.0	2400.69	0
11900	15	326.967	8140.85	11584.85	2034.34	1322.76	438303.7	499781.9	2426.57	0
12000	15	326.967	8237.44	11681.44	2056.04	1336.87	438325.4	499767.8	2452.45	0
12100	15	326.967	8334.03	11778.03	2077.74	1350.98	438347.1	499753.7	2478.33	0
12200	15	326.967	8430.63	11874.63	2099.44	1365.09	438368.8	499739.6	2504.22	0
12300	15	326.967	8527.22	11971.22	2121.13	1379.20	438390.5	499725.5	2530.1	0
12329.8	15	326.967	8556	12000	2127.60	1383.40	438397.0	499721.3	2537.81	0 Target - PBHL Estill AD Fed 3 Current Target
12400	15	326.967	8623.81	12067.81	2142.83	1393.30	438412.2	499711.4	2555.98	0
12500	15	326.967	8720.4	12164.4	2164.53	1407.41	438433.9	499697.2	2581.86	0
12600	15	326.967	8817	12261	2186.23	1421.52	438455.6	499683.1	2607.74	0
12700	15	326.967	8913.59	12357.59	2207.93	1435.63	438477.3	499669.0	2633.63	0
12800	15	326.967	9010.18	12454.18	2229.63	1449.74	438499.0	499654.9	2659.51	0
12900	15	326.967	9106.78	12550.78	2251.33	1463.85	438520.7	499640.8	2685.39	0
13000	15	326.967	9203.37	12647.37	2273.02	1477.96	438542.4	499626.7	2711.27	0
13100	15	326.967	9299.96	12743.96	2294.72	1492.07	438564.1	499612.6	2737.15	0
13200	15	326.967	9396.55	12840.55	2316.42	1506.17	438585.8	499598.5	2763.03	0
13300	15	326.967	9493.15	12937.15	2338.12	1520.28	438607.5	499584.4	2788.92	0
13365.07	15	326.967	9556	13000	2352.24	1529.46	438621.6	499575.2	2805.76	0 Total Depth at 13365.07ft

All data is in feet (us) unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to RKB(3444' +20' KB). Northings and Eastings are relative to Wellhead.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Wellhead and calculated along an Azimuth of 326.967° (Grid).

Coordinate Eastern Zone.
Grid Convergence at Surface is 0.002°.

Based upo at a Measured Depth of 13365.07ft.
The Bottom in the Direction of 326.967° (Grid).