

N.M. Oil Cons. Div-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

Form 3160-3  
(April 2004)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☐ DRILL ☒ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
Nadel and Gussman Permian, LLC

3a. Address 601 N. Marienfeld, Suite #508  
Midland, TX 79701

3b. Phone No. (include area code)  
432-682-4429

4. Location of Well (Report location clearly and in accordance with any State requirements:\*)

At surface UL H Sec. 8 T13S R27E 2,034' FNL and 660' FEL

At proposed prod. zone UL H Sec. 8 T13S R27E 2,034' FNL and 660' FEL

14. Distance in miles and direction from nearest town or post office\*  
8.5 miles northeast of Dexter, NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)  
660'

16. No. of acres in lease  
320 acres +

17. Spacing Unit dedicated to this well  
East 1/2 Stand Up

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

19. Proposed Depth  
6,500'

20. BLM/BIA Bond No. on file  
NM 2812

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3501'

22. Approximate date work will start\*  
06/20/2005

23. Estimated duration  
7

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature *Josh Fernau*

Name (Printed/Typed)  
Josh Fernau

Date  
02/09/2005

Title  
Staff Engineer

Approved by (Signature) *ISLARRY D. BRAY*

Name (Printed/Typed)  
ISLARRY D. BRAY

Date  
FEB 18 2005

Title  
Assistant Field Manager,  
Lands And Minerals

Office  
ROSWELL FIELD OFFICE

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, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

APPROVED FOR 1 YEAR

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS ATTACHED

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
**District II**  
1301 W. Grand Avenue, Artesia, NM 88210  
**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

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

For drilling and production facilities, submit  
to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe  
office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Nadel and Gussman Permian, LLC Telephone: 432-682-4429 e-mail address: joshf@naguss.com  
Address: 601 N. Marienfeld Suite 508 Midland, TX 79701  
Facility or well name: Cazador Federal #1 API #: 30-005-60975 or Qtr/Qtr H Sec 8 T 13S R 27E  
County: Chaves Latitude N32deg 12' 24.0" Longitude W104deg 15' 08.7" NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

<u>Pit</u>	<u>Below-grade tank</u>	
Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness <u>      </u> mil Clay <input type="checkbox"/> Pit Volume <u>      </u> bbl	Volume: <u>      </u> bbl Type of fluid: <u>      </u> Construction material: <u>      </u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. <u>      </u>	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet	(10 points)
	100 feet or more	( 0 points)0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes	(20 points)
	No	( 0 points)0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet	(20 points)
	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	( 0 points)0
Ranking Score (Total Points)		0

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility       . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface        ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:
No Cutting Pits or Reserve Pits are Planned

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

Date: 02/09/05

Printed Name/Title Josh Fernau Staff Engineer

Signature Josh Fernau

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title

Signature

FEB 24 2005

**UNITED STATES DEPARTMENT OF INTERIOR**

Bureau of Land Management  
Roswell Field Office  
2909 West Second Street  
Roswell, New Mexico 88201-1287

**Statement Accepting Responsibility for Operations**

Operator Name: Nadel and Gussman Permian, L.L.C.  
Address: 601 N. Marienfeld, Suite 508  
City, State: Midland, Texas  
Zip Code: 79701

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land, or portion thereof, as described below:

Lease Name: Cazador Federal #1

Lease Number: NM NM 108037

Legal Description of Land: (SHL) 2,034' FNL & 660' FEL, UL H Sec. 8, T13S-R27E, Chaves Co., NM

Lease Covers: East ½ except SW, SE

Spacing Unit: East ½ standup

Formations: Wolfcamp

Bond Coverage: State Wide

BLM Bond File Number: NM 2812

Land is privately owned.

Authorized Signature: \_\_\_\_\_



Name: Josh Fernau

Title: Staff Engineer

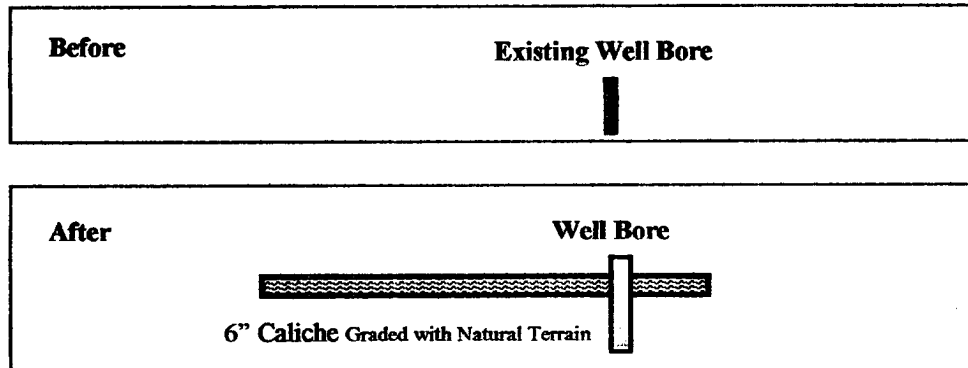
Date: 02/09/05

### **13 Point Land Use Plan**

1. **Existing Roads** - A small scale vicinity map is attached (**Exhibit #3**) which shows the location of this well in relation to an aerial view of surrounding townships and ranges. A larger scale topographical map is (**Exhibit #5**) shows the location of the well.
2. **Planned Access Roads** - There is an existing access road from the location to the nearest exit leaving the lease, which is shown on (**Exhibit #4**). The lease is fenced and a cattle guard with gate will be needed.
3. **Location of Existing Wells** - This is a Re-entry of the Pecos River Bluff Unit #1. The Buffalo Hunt #1, drilled by Nadel and Gussman Permian, LLC is located in Section 21, T13S-R27E, 660' FSL & 1980' FEL.
4. **Location of Tank Batteries, Production Facilities & Lines** -
  - We anticipate gas production from the Wolfcamp Three Brothers, with possible volumes of produced oil or water. We will build a battery with a minimum of two 210 Bbl steel tanks, one for oil and one for water.
  - Pipe lines will be used to transport the sales of the natural gas using the access road to location.
  - We will also have a line heater and separator on location. All produced fluids from the Montoya or Abo will be hauled off lease by road. There are no initial plans for oil pipelines, LACT units or SWD lines.
  - We do not anticipate a need for electrical service on the lease at this time.
5. **Location & Type- of Water Supply** - Fresh and salt water will be trucked from the most economical location by a third- party contractor.
6. **Source of Construction Material** - Primary source of caliche will be the closest most economical existing pit preceded by the proper documentation and approval.
7. **Methods of Handling Waste Disposal** - A closed loop system will be used to handle any waste generated from re-entering the existing wellbore. The waste will then be hauled off to the closest disposal site preceded by the proper documentation and approval. This will prevent further contamination in this area made by drilling, Nadel and Gussman Permian, LLC will incur no responsibility for the existing pit.
8. **Ancillary Facilities** - There are no camps or airstrips planned.
9. **Well Site Layout** - The well site (see NMOCD C-102 Form) has been re-staked and is also indicated on the enclosed maps (**Exhibits #1, #2, #3, #4 & #5**). The proposed well location is at the base of an

rock from grade cut. The drilling pad will blend in with the terrain since the topography is generally flat.

Cross section – Before and after is shown below:



#### 10. Plans for Restoration of Surface – Commercial Well:

- Reshaped Topography – Rubbish will be hauled off upon completion of drilling operations. All future rubbish will be removed by the subcontractor generating same.
- Caliche Pad – Caliche drilling pad will remain intact until well is abandoned.
- Road – The road will remain intact as long as there is production on the lease.
- Timetable – This well is expected to produce for several years.
- Plans for Restoration of Surface – Plugged and Abandoned Well:

Surface will be restored in accordance with all regulations in effect at the time of abandonment.

#### 11. Other Information –

- Topography – The proposed well location is on a east/west trending low rise.
- Soil Characteristics – Soils are classified as Tencee-Sotim association. Observed soils are rock with fine sands.
- Flora – Vegetation includes mesquite, little leaf sumac, cholla cactus, yucca, snakeweed, and mixed grasses.
- Fauna – rabbits, mice, rats, birds, deer and snakes
- Other Surface Use Activities – Ranching
- Surface Ownership – Private (Fee)
- Water Wells – No windmills within 1000' of the location.
- Lakes, Streams, Ponds – There are draws (Exhibit #5).
- Dwellings – There are no inhabited structure within 1000' of the location.
- Archeological Summary – It is recommended that construction of the proposed well location and access road precede without any additional cultural resource investigations.

**12. Operator's Representative -**

Joel Martin	Office Phone	(432) 682-4429
	Home Phone	(432) 694-2569
	Mobile Phone	(432) 238-9969
Josh Fernau	Office Phone	(432) 682-4429
	Home Phone	(806) 978-1523
	Mobile Phone	(432) 238-2874
Lee Ledbetter	Office Phone	(505) 746-1428
	Home Phone	(505) 887-0866
	Mobile Phone	(505) 631-6071

- 13. Certification -** I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site and access route; that I am familiar with the condition which presently exists; 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 a construction company or their contractors and sub-contractors in conformity with this plan.



Josh Fernau  
Staff Engineer  
Date: 02/09/05

**13 Point Drilling Plan:**

- Location:** (SHL) 2,034' FNL & 660' FEL, UL H Sec. 8, T-13-S, R-27-E, Chaves County, New Mexico  
(Form C-102)
- Elevation:** 3501' GL
- Geological Name of Surface Formation:** Tencee-Sotim
- Type of Drilling Tools to be utilized:** Rotary Tools
- Proposed Re-enter Depth:** 6,500'
- Tops of Important Geological Markers:**

San Andres	1,100'	B/Abo Shale	5,000'	Three Brothers $\Phi$	6,202'
P, $\Phi$	1,573'	Wolfcamp	5,530'	B/ Three Brothers $\Phi$	6,208'
Abo	4,612'	Three Brothers	6,184'	Cisco	6,262'

7. Estimated Depth of Anticipated Water, Oil or Gas:

Oil and Gas	-San Andres	1,100'
Gas	-Abo	4,612'
Gas	-Three Brothers $\Phi$	6,202'
Gas	-Cisco	6,262'

8. Casing Program:

Old Strings

- 13 3/8" 48# H-40 @ 360' circulated to surface
- 9 5/8" 32.3# H-40 @ 1,300' circulated to surface

New String

- 5 1/2" 17# J-55 @ 6,500' TOC based on logs

The 5 1/2" casing string will be cemented. The TOC on the 5 1/2" casing will be based upon open hole logs.

9. Specifications for Pressure Control Equipment: (Exhibit #6)

This rig will have a 11" 5M BOP with pipe rams and blind rams, kill line, choke manifold, Komey hydraulic controls, and accumulator with remote controls. When nipping up, will test BOP and choke to 1000 psi, will operate BOP once a day or as directed by the company representative.

10. Mud Program:

Re-enter the hole with brine water. This will be a closed system therefore all fluid will be circulated through the working pits. Attention should be paid to the possibility of hole problems from Abo @ 4,612' if needed, condition the fluid to achieve the following properties: Mud Weight 9.6 – 10.0, Viscosity 32-40 and Fluid Loss < 5. Hole conditions will dictate the mud properties needed to avoid problems.

11. Testing, Logging & Coring Program:

- a. Testing: No DST's are expected.
- b. Coring: no coring is planned.
- c. Logging: open hole logs will be run prior to running production casing. The standard suite will be a Dual Lateral/ ML and GR/Density/Neutron combination.
- d. Depending on the sand quality, a FMI and/or formation tester may be run.
- e. Open hole logs will not be run through the surface hole section.

12. Potential Hazards:

No significant hazards are expected. Lost circulation may occur, no H<sub>2</sub>S expected, but the operator will utilize a 3<sup>rd</sup> party H<sub>2</sub>S monitoring package from 1,300' to 6,500'.

## **Hydrogen Sulfide Drilling Operations Plan**

1. Company and Contract personnel admitted on location should be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S.
  - B. Physical Effects and Hazards.
  - C. Proper Use of Safety Equipment and Life Support Systems.
  - D. Principle and Operation of H<sub>2</sub>S Detectors, Warning System and Briefing.
  - E. Evacuation Procedure, Routes and First Aid.
  - F. Proper Use of 30 minute Pressure Demand Air Pack.
2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S Detectors and Audio Alarm System to be Located at Bell Nipple, End of Blooie Line (mud pit) and on Derrick floor or doghouse.
3. Windsock and/or Wind Streamers
  - A. Windsock at Mud Pit Area Should be High Enough to be Visible.
  - B. Windsock at Briefing Area Should be High Enough to be Visible.
  - C. There Should be a Windsock at Entrance to Location.
4. Condition Flags and Signs
  - A. Warning Sign on Access Road to Location.
  - B. Flags to be Displayed on Sign at Entrance to Location.
    1. Green Flag, Normal Safe Condition.
    2. Yellow Flag, Indicates Potential Pressure and Danger.
    3. Red Flag, Danger H<sub>2</sub>S Present in Dangerous Concentration Only Emergency Personnel Admitted to Location.
5. Well Control Equipment
  - A. See Exhibit #6.
6. Communication
  - A. While Working Under Masks Chalkboards Will be Used for Communication.
  - B. Hand Signals will be Used Where Chalk Board is Inappropriate.
  - C. Two Way Radio or Cell Phone will be Used to Communicate off Location in Case of Available at Most Drilling Foreman's Trailer or Living Quarters.
7. Drillstem Testing
  - A. Exhausts will be Watered.
  - B. Flare Line will be Equipped with an Electric Igniter or a propane pilot light in case gas reaches the surface.
  - C. If Location is near any Dwelling a Closed DST will be Performed.
8. Drilling Contractor Supervisor will be Required to be Familiar with the Effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
9. If H<sub>2</sub>S Encountered, Mud system will be Altered if Necessary to Maintain Control of Formation. A Mud Gas Separator will be Brought into Service Along with H<sub>2</sub>S Scavengers if Necessary.



Exhibit #1  
State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name CAZADOR FEDERAL	Well Number 1
OGRID No.	Operator Name NADEL AND GUSSMAN PERMIAN	Elevation 3501'

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	8	13 S	27 E		2034	NORTH	660	EAST	CHAVES

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
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Josh Fernan</u> Signature <u>Josh Fernan</u> Printed Name <u>Staff Engineer</u> Title <u>02/09/05</u> Date</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p><u>JANUARY 11, 2005</u> Date Surveyed <u>GARY L. JONES</u> Signature &amp; Seal of Professional Surveyor <u>7977</u> S.W.O. No. 1990 Certificate No. 7977 BASIC SURVEYS</p>
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SECTION 8, TOWNSHIP 13 SOUTH, RANGE 27 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

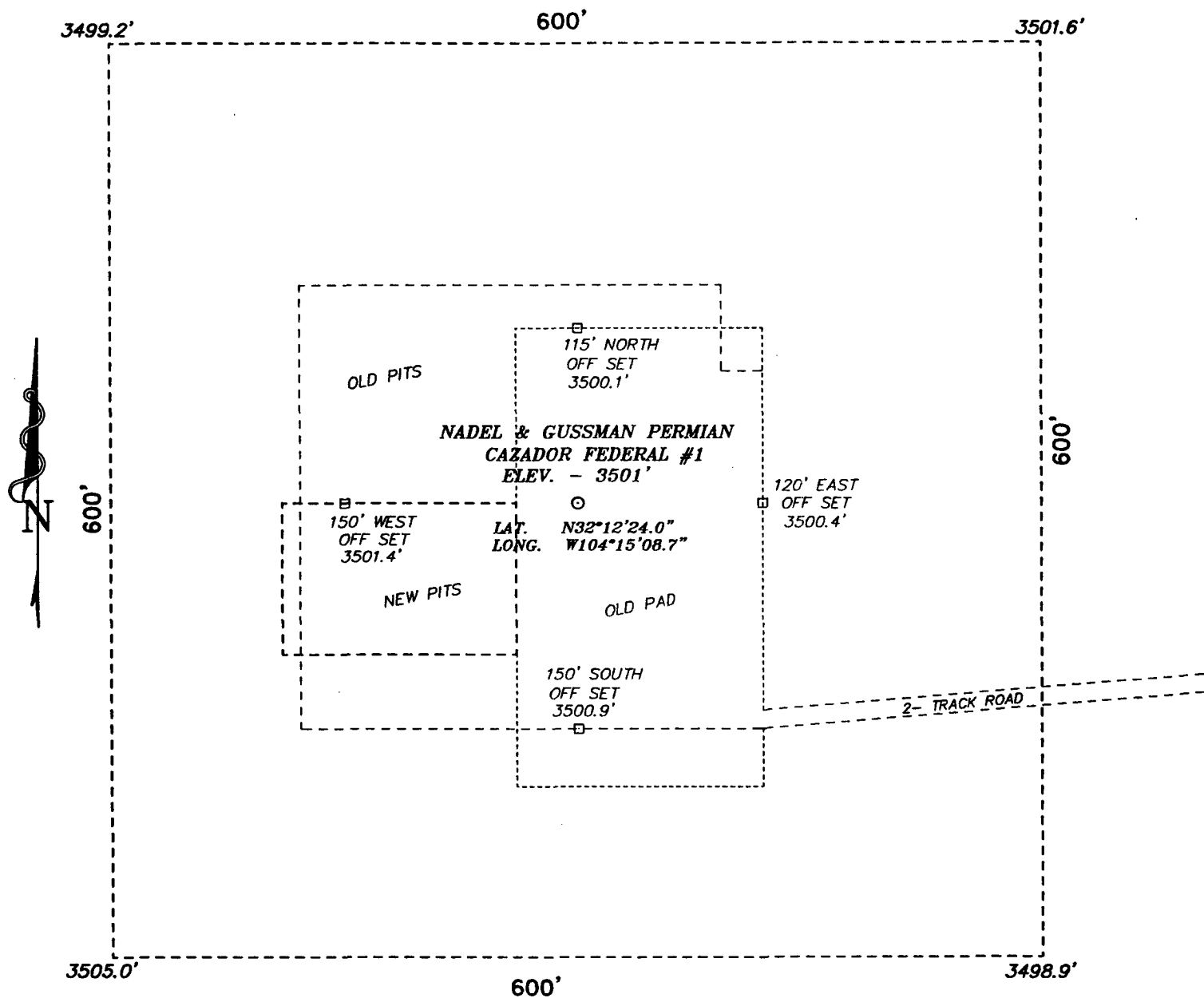
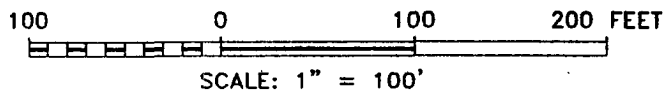


Exhibit #2



Directions to Location:

FROM DEXTER, EAST ON STATE HWY 190 FOR 2.0 MILES TO WICHITA ROAD; THENCE NORTH ON WICHITA ROAD FOR 1.7 MILE TO MERLINDA RD.; THENCE EAST FOR 4.8 MILES JUST PAST RANCH HOUSE; THENCE SOUTH ON LEASE ROAD FOR APPROX. 2.0 MILES TO 2-TRACK ROAD; THENCE WEST ON 2-TRACK ROAD TO LOCATION.

**NADEL AND GUSSMAN PERMIAN**

REF: CAZADOR FEDERAL No. 1 / Well Pad Topo

CAZADOR FEDERAL No. 1 LOCATED 2034' FROM THE NORTH LINE AND 660' FROM THE EAST LINE OF SECTION 8, TOWNSHIP 13 SOUTH, RANGE 27 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 4990

Drawn By: K. GOAD

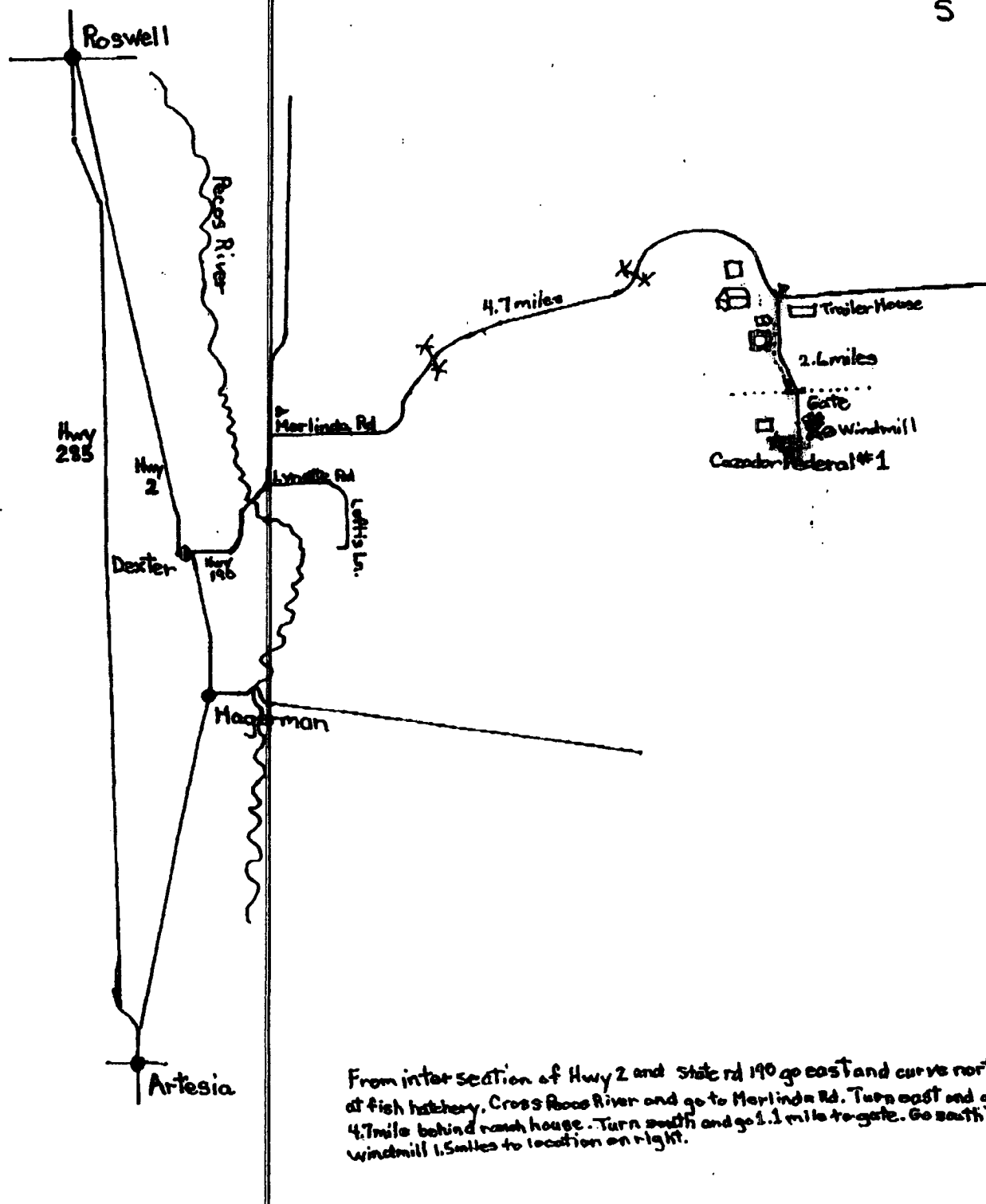
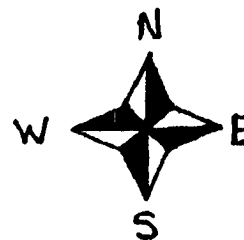
Date: 01-12-2005 Disk: KJG #9 - 4990A.DWG

Survey Date: 01-11-2005

Sheet 1 of 1 Sheets

Exhibit #4

Nadel & Gussman Permian, LLC  
Cheetah Prospect  
Cazador Federal #1



From inter section of Hwy 2 and state rd 190 go east and curve north at fish hatchery. Cross Rio Grande and go to Merlinda Rd. Turn east and go 4.7 miles behind ranch house. Turn south and go 1.1 mile to gate. Go south by windmill 1.5 miles to location on right.

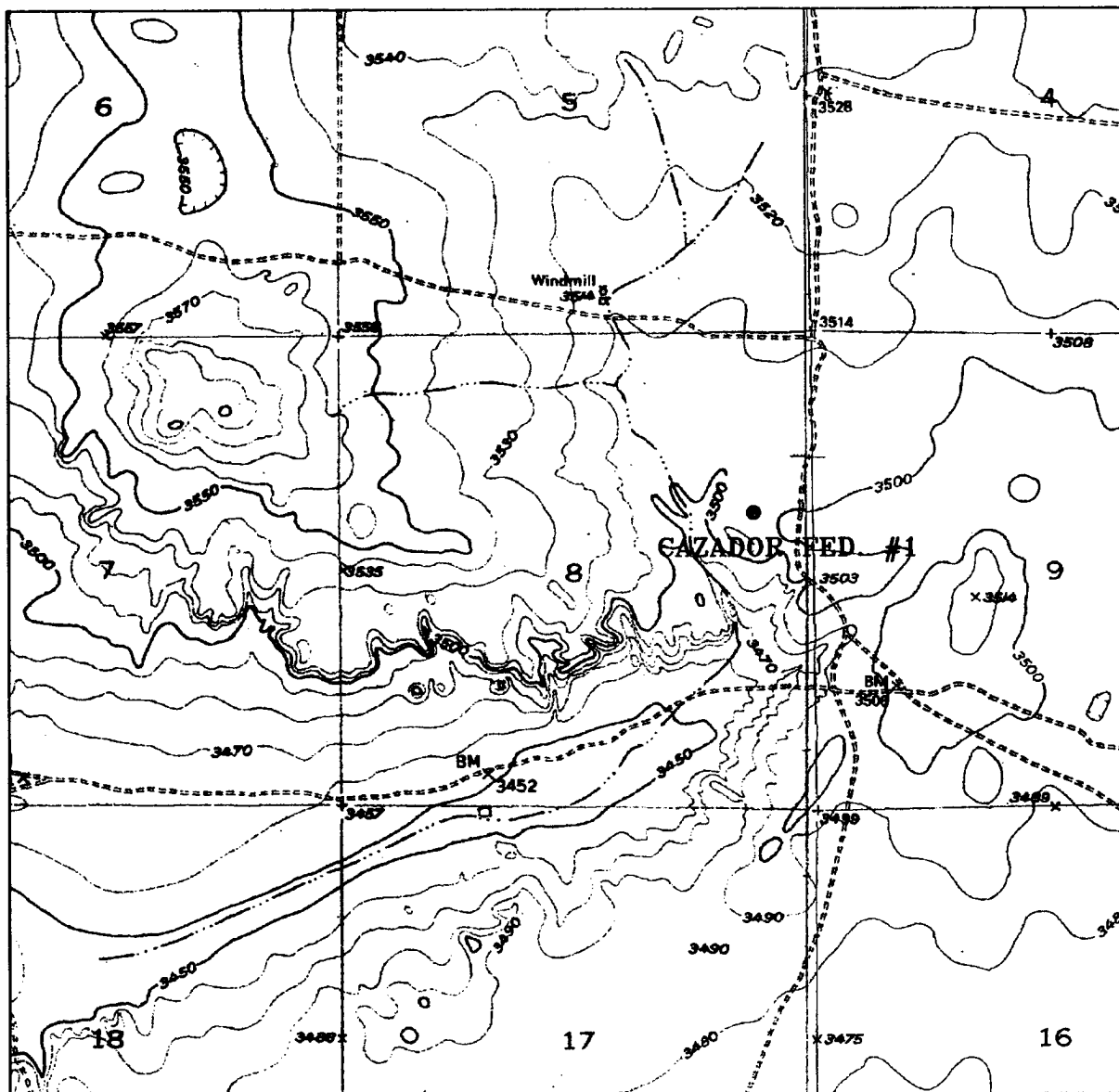


Exhibit #5

### CAZADOR FEDERAL #1

Located at 2034' FNL and 660' FWL  
 Section 8, Township 13 South, Range 27 East,  
 N.M.P.M., Chaves County, New Mexico.

**basin**  
**surveys**

focused on excellence  
 in the oilfield

P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 4990AA - KJG #1

Survey Date: 01-11-2005

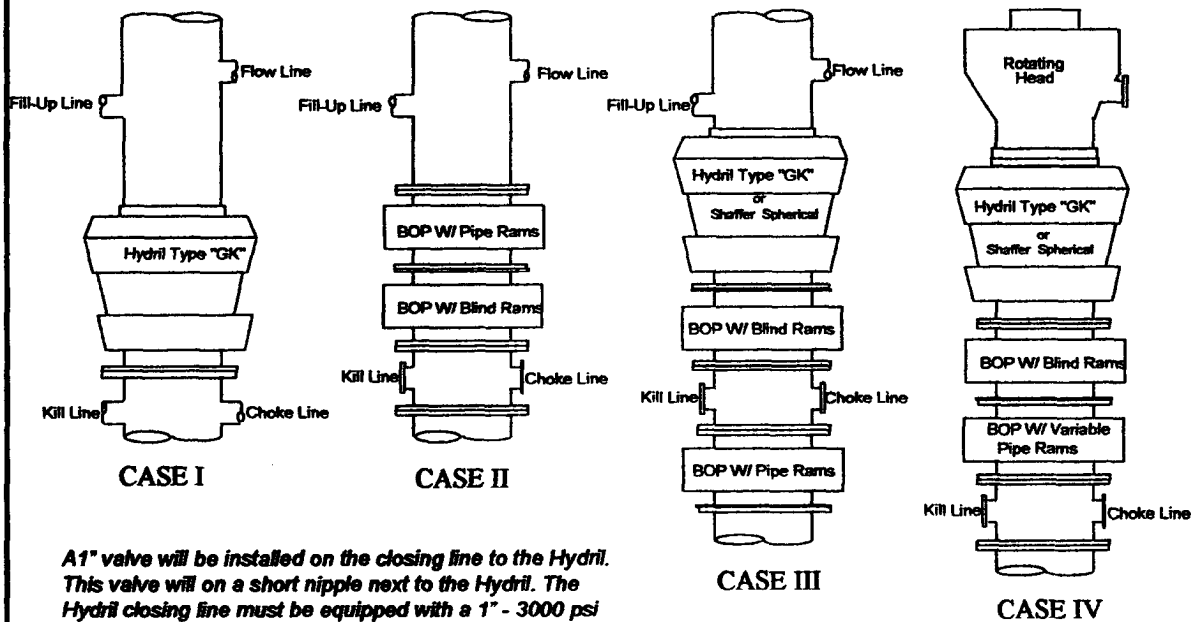
Scale: 1" = 2000'

Date: 01-12-2005

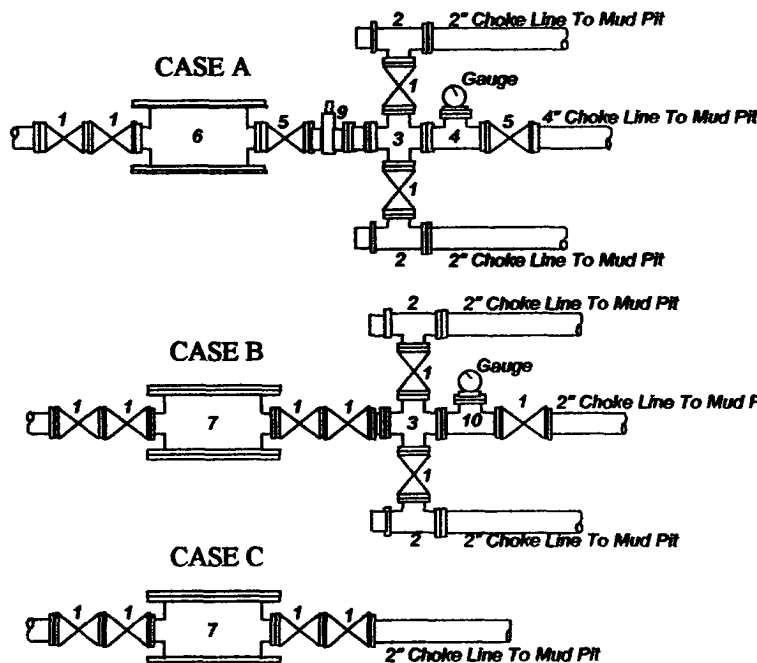
**NADEL AND**  
**GUSSMAN PERMIAN,**  
**L.L.C.**

# Nadel and Gussman Permian

## MINIMUM BLOWOUT PREVENTER REQUIREMENTS



A1" valve will be installed on the closing line to the Hydril. This valve will be on a short nipple next to the Hydril. The Hydril closing line must be equipped with a 1" - 3000 psi WP plug valve on the nipple into the Hydril.



BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
11"	IV	5,000	A

**\*Rotating head required**

Bradenhead : \_\_\_\_\_  
Mfr: \_\_\_\_\_  
Size: \_\_\_\_\_ Type: \_\_\_\_\_

Exhibit #6

### Legend

1. 2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shaffer Flo-Seal.
2. 2" flanged adjustable chokes, min. 1" full opening & equipped with hard trim.
3. 4" x 2" flanged steel cross.
4. 4" flanged steel tee.
5. 4" flanged all steel valve (Type as in no. 1).
6. Drilling Spool with 2" x 4" flanged outlet.
7. Drilling Spool with 2" x 2" flanged outlet.
8. 2" x 2" flanged steel cross.
9. 4" pressure operated gate valve.
10. 2" flanged steel tee.

### Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

(10-31-96) WTXBOPS.PPT

**Exhibit #7**

