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

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

Form C-101
May 27, 2004

RECEIVED
JAN 30 2006
OCD-ARTESIA

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
Nadel and Gussman Permian, LLC 601 N. Marienfeld Suite 508 Midland, TX 79701	155615
	[3] API Number 30 – 015- 34572

[5] Property Code	[5] Property Name	[6] Well No.
35418	Hermes Fee	#1

[9] Proposed Pool 1	[10] Proposed Pool 2
80695 Loving Morrow, North	

[7] 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	30	23 S	28 E		1,980	North	660	East	Eddy

[8] Proposed 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

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	P	3,095'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	12,900'	Morrow	Paterson - UTI	02/22/06

Depth to Groundwater: 50' or more but less than 100' | Distance from nearest fresh water well: 200' or more but less than 1,000' | Distance from nearest surface water: Greater than 1,000'

Pit: Liner: Synthetic ☒ 20 mils thick Clay ☐ Pit Volume: 15,000 bbls Drilling Method:

Closed-Loop System ☐ Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐

LW

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 ½"	13 3/8"	48# H-40	400'	300sx	Circ. to Surf.
12 ¼"	9 5/8"	40# N-80	5,000'	900sx	Circ. to Surf.
8 ¾"	5 ½"	17#, 20# HCP-110	12,900'	1,550sx	TOC @ 9,000'

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Nadel and Gussman Permian, LLC proposes to drill the Hermes Fee #1. A mud gas separator will be installed and tested prior to drilling the Wolfcamp. A BOP will be installed on the 9 5/8" and tested. Cement to cover all water, oil and gas producing zones. NGP will notify NMOCD of spud date and cementing times so the surface and intermediate casing strings could be witnessed. No H_2S is expected, but a contingency is attached.

CEMENT TO COVER ALL OIL, GAS AND WATER BEARING ZONES

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Signature: Josh Fernau

Printed name: Josh Fernau

Title: Staff Engineer

E-mail Address: joshf@naguss.com

Date: 01/26/06 Phone: 432-682-4429

BLM OIL CON

Approved by: Jerry W. Guye
District II Supervisor

Title:

Approval Date: JAN 31 2006 Expiration Date: JAN 31 2007

Conditions

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

DISTRICT I
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
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87504-2088

Form C-102
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	HERMES FEE	1
OGRID No.	**Operator Name**	**Elevation**
	NADEL AND GUSSMAN PERMIAN	3095'

Surface Location

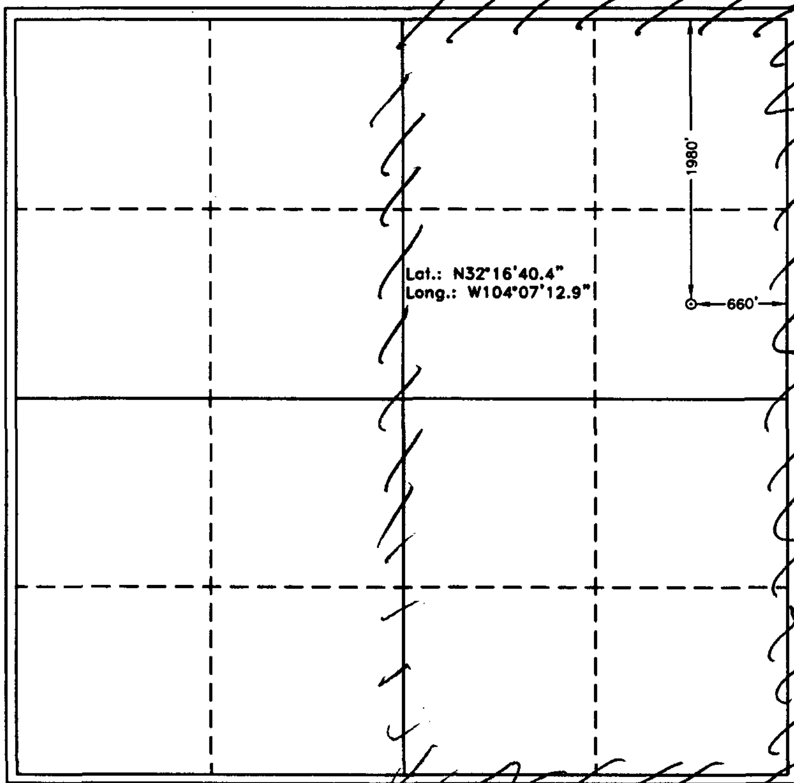
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	30	23 S	28 E		1980	NORTH	660	EAST	EDDY

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature: [signature]

Printed Name: Josh Fernau

Title: Staff Engineer

Date: 01/27/06

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my belief.

DECEMBER [illegible] 2005

Date Surveyed

Signature & Seal of Professional Surveyor

NEW MEXICO
7977

W.O. No. 6084

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

NADEL AND GUSSMAN PERMIAN, L.L.C.
601 N. Marienfeld, Suite 508
Midland, TX 79701
(432) 682-4429 (Office)
(432) 682-4325 (Fax)

01/26/06

Mr. Bryan Arrant
District 2 Geologist
New Mexico Oil and Gas Division
1301 West Grand Avenue
Artesia, NM 88210

Re: Hermes Fee #1
1,980' FNL & 660' FEL
Unit Letter H, Sec. 30-T23S-R28E
Eddy, NM
Rule 118 H2S Exposure

Dear Mr. Arrant,

Nadel and Gussman Permian have evaluated this well and we do not expect to encounter hydrogen sulfide. However, we will employ a third party monitoring system. We will begin monitoring prior to drilling out the intermediate casing and will continue monitoring the remainder of the well.

Please contact me if you have any additional questions.

Sincerely,

Josh Fernau
Staff Engineer

Hydrogen Sulfide Drilling Operations Plan

1. Company and Contract personnel admitted on location should be trained by a qualified H_2S safety instructor to the following:
   A. Characteristics of H_2S.
   B. Physical Effects and Hazards.
   C. Proper Use of Safety Equipment and Life Support Systems.
   D. Principle and Operation of H_2S Detectors, Warning System and Briefing.
   E. Evacuation Procedure, Routes and First Aid.
   F. Proper Use of 30 minute Pressure Demand Air Pack.

2. H_2S Detection and Alarm Systems
   A. H_2S 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_2S Present in Dangerous Concentration Only Emergency Personnel Admitted to Location.

5. Well Control Equipment
   A. See Attached Diagram.

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.

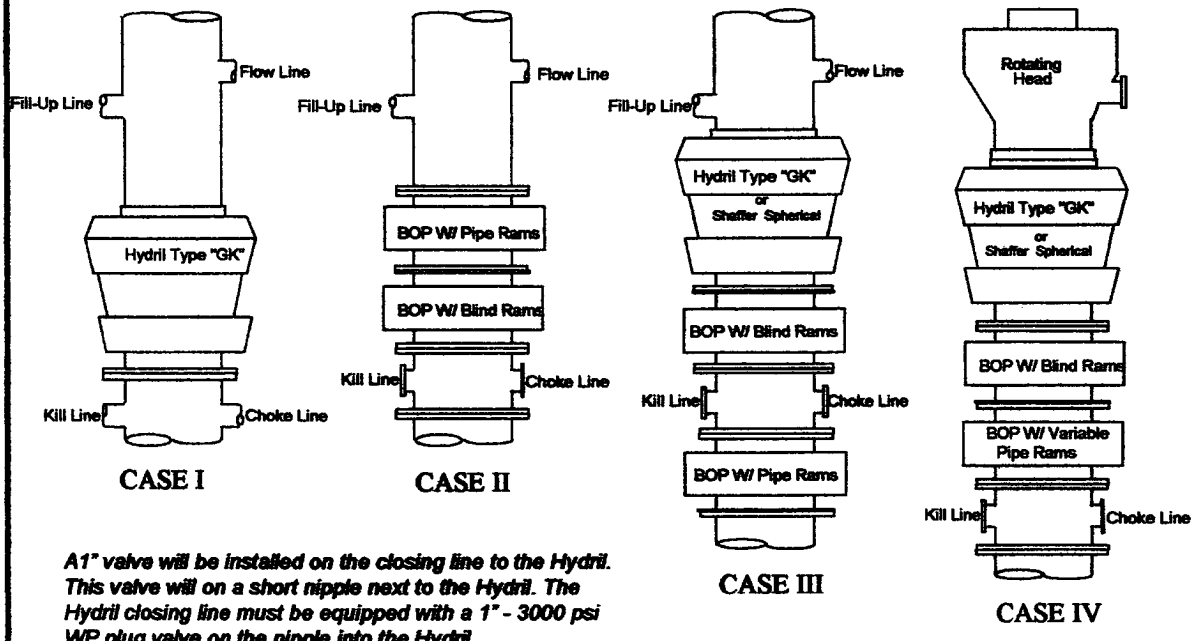
7. Drillstem Testing
   A. Exhausts will be Watered.
   B. Flare Line will be Equipped with an Electric Igniter or a propane pilot light in case gas reaches the surface.
   C. If Location is near any Dwelling a Closed DST will be Performed.

8. Drilling Contractor Supervisor will be Required to be Familiar with the Effects H_2S has on tubular goods and other mechanical equipment.

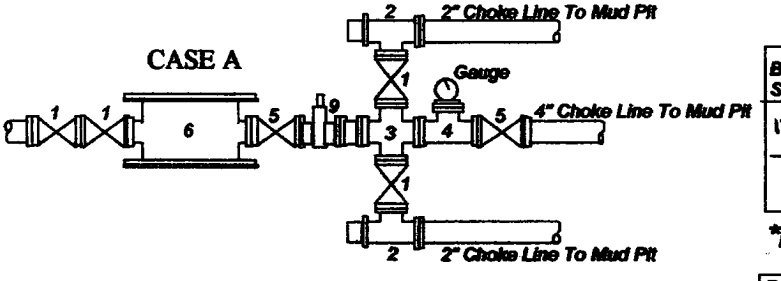
9. If H_2S Encountered, Mud system will be Altered if Necessary to Maintain Control of Formation. A Mud Gas Separator will be Brought into Service Along with H_2S Scavengers if Necessary.

Nadel and Gussman Permian _____

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

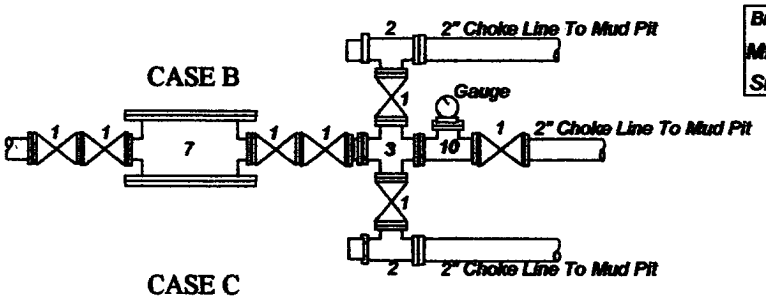


A1" valve will be installed on the closing line to the Hydril. This valve will on a short nipple next to the Hydril. The Hydril closing line must be equipped with a 1" - 3000 psi WP plug valve on the nipple into the Hydril.

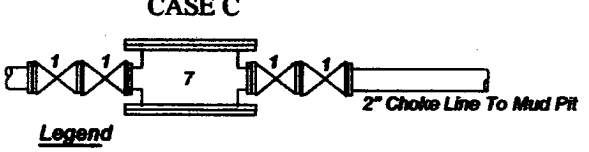


BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
13 5/8"	IV	5,000#	A

**Rotating head required*



Bradenhead :
Mfr: _____
Size: _____ *Type:* _____



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 & equiped 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 butt 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

RECOMMENDED MUD PROPERTIES

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0-400'	8.4-9.0	26-36	1-3	1-3	N/C	N/A	9.5-10.0	<5	<10K
400'-6,100'	9.7-10.2	28-32	1-3	2-5	N/C	N/A	9.5-10.0	<3	>150,000
6,100'-10,400'	8.4-9.0	26-30	1-3	2-5	N/C	N/A	9.5-10.0	<2	>50K
10,400'-12,900'	10.0-12.0	35-45	6-9	9-18	<6	N/A	9.5-10.0	<5	>150K

0-400' MD

- A fresh water spud mud is recommended to drill this section of the hole.
- Circulate through the steel pits.
- Use **AQUAGEL®** for the initial viscosity.
- Lime will be used for alkalinity and flocculation.
- **EZ-MUD®** additions may be made at the drill pipe or run in sweeps to aid with hole cleaning.
- **HY-SEAL®** can be used also for sweeps and seepage control.
- If total losses are experienced, a more aggressive mixture of **HY-SEAL®, PLUG-GIT®,** or **BARO-SEAL®** can be used.
- Pump a hi-vis sweep (80-100 sec/qt) at TD to clean the hole.

400'-6,100 MD

- Drill out with fresh water and displace to brine after drilling cement.
- Additions of lime and caustic soda can be used throughout this interval for ph control.
- Control seepage losses with **HY-SEAL®, PLUG-GIT®,** or **BARO-SEAL®.**
- Sweep the hole with **EZ-MUD®** for hole cleaning.
- Use **ZEOGEL®** as needed for viscosity or in sweeps.

6,100' – 10,400'

- Drill out with fresh water working through the reserve pit and drill to 10,400'
- Lime and caustic soda will be used for ph control.
- Control seepage losses with **HY-SEAL®, PLUG-GIT®,** or **BARO-SEAL®.**
- Sweep the hole with **EZ-MUD®** for hole cleaning.

10,400' – 12,900'

- Prior to drilling the **Canyon** (±10,400'), displace to 10.0 ppg. brine water.
- Mud-up at ±10,500'. Increase the mud weight to 12.0 ppg. prior to drilling the **Atoka** (±11,100').
- Additions of **POLYOL HM** will aid to inhibit and stabilize the water sensitive shales.
- Reduce the total hardness concentration of the mud with soda ash.
- Maintain viscosity/rheology with **BARAZAN® D PLUS.**
- Reduce the fluid loss as recommended with **DEXTRID®** prior to drilling the **Morrow** (±12,200').
- Maintain pH with caustic soda.
- Add **HY-SEAL®, PLUG-GIT®,** or **BARO-SEAL®** for seepage or lost returns.
- Pump **EZ-MUD®** and **HY-SEAL®** sweeps to aid with hole cleaning.
- Pump a hi-vis sweep (80-100 sec/qt) at TD to clean the hole.

DRILLING FLUID DISCUSSION BY INTERVAL

MD/TVD (ft)	Mud Weight (ppg)	Funnel Vis.	PV	YP	Fluid Loss	HTHP @ 250	pH	% Solids	CT
0-400'	8.4-9.0	26-36	1-3	1-3	N/C	N/A	9.5-10.0	<5	<10K

Interval: 0-400' MD: Spud Mud

Mud Properties:

Operation: Spud in and drill a 17 ½" hole and drill to ±300'. Set 13 ⅜" surface casing.

Mud System: A fresh water system with **AQUAGEL®** is recommended for drilling this interval. Lime will be added to aid flocculation and to adjust ph for corrosion control.

Solids Control: Fully utilize at least two linear motion shakers, rig desilter, and rig desander to control drill solids. Run the finest mesh screens that will accommodate pump rates.

Issues: Lost Returns/Seepage - Add **HY-SEAL®** as needed for seepage. Use **PLUG-GIT®** or **BARO-SEAL®** if needed for lost returns. Circulation losses should be anticipated while drilling the surface hole. If returns cannot be established, "dry-drill" to surface casing TD.

Hole Cleaning: Use **EZ-MUD®** in sweeps or poured directly down the drill pipe on connections. **HY-SEAL®** can also be used for hole cleaning and/or tight connections. With the fast penetration rates and low annular viscosities it is important to maintain adequate viscosity to clean the large diameter hole. The cuttings should be circulated above the BHA prior to connections.

Sweep the hole at TD with a viscous EZ-MUD® and HY-SEAL® pill prior to wiper trip and while circulating and conditioning the hole for surface casing.

MD/TVD (ft)	WEIGHT (ppg)	FUN	PV	YP	API	HTHP @ 250	pH	% SOLIDS	CT
400'-6,100'	9.7-10.2	28-32	1-3	2-5	N/C	N/A	9.5-10.0	<3	>150,000

Interval: 400'-6,100 MD: Brine Water

Mud Properties:

Operation: Drill out of surface casing and obtain successful shoe test. Drill a 12 ¼" hole to 6,100'. Set 9 ⅝" intermediate casing.

Mud System: Prior to drilling out, dump and clean the sand trap and settling pit. Dump as much cement contaminated mud as possible. Drill out of the surface casing with fresh water. Displace the system with 10.0 ppg. brine after drilling cement. Lime and caustic soda will be added to aid flocculation and to adjust ph for corrosion control. Pump **EZ-MUD®** sweeps to aid in hole cleaning.

Solids Control: Fully utilize at least two linear motion shakers, rig desilter, and rig desander to control drill solids. Run the finest mesh screens that will accommodate pump rates.

Issues: Seepage - Add **HY-SEAL®** as needed for seepage. **PLUG-GIT®** or **BARO-SEAL®** can be used for any lost returns.

Hole Cleaning- Use **EZ-MUD®** and **HY-SEAL®** in sweeps.

Sweep the hole at TD with a viscous EZ-MUD® and HY-SEAL® pill prior to wiper trip and while circulating and conditioning the hole for surface casing.

MD(RKB) (ft)	WEIGHT (ppg)	FUN	PV	YP	API	HTHP @ 250	pH	% SOLIDS	CF
6,100'-10,400'	8.4-9.0	26-30	1-3	2-5	N/C	N/A	9.5-10.0	<2	>50K

Interval: 6,100' – 10,400' MD: Brine Water

Mud Properties:

Operation: Drill out of intermediate casing and obtain successful shoe test. Drill an 8 ¾" hole.

Mud System: Prior to drilling out, dump and clean the sand trap and settling pit. Dump as much cement contaminated mud as possible. Drill out of the casing with fresh water, working through the reserve pit. Drill out the intermediate casing with fresh water and drill to ±10,400'. Prior to drilling the Canyon (±10,400') displace to 10.0 ppg. brine. The addition of **POLYOL HM (1/2 to 1% by volume)** will aid to inhibit and stabilize the water sensitive shale. Reduce the total hardness concentration to <150 mg/l with soda ash. Lime and Caustic soda will be added to adjust ph for corrosion control.

Solids Control: Fully utilize at least two linear motion shakers, rig desilter, and rig desander to control drill solids. Run the finest mesh screens that will accommodate pump rates.

Issues: Lost Returns/Seepage - Add **HY-SEAL®, PLUG-GIT®,** or **BARO-SEAL®** for seepage or lost returns.

Hole Cleaning: Use **EZ-MUD®** and **HY-SEAL®** in sweeps.

[illegible] (ft)	[illegible] (ppg)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10,400'-12,900'	10.0-12.0	35-45	6-9	9-18	<6	N/A	9.5-10.0	<5	>150K

Interval: 10,400' – 12,900' MD: Brine Water

Mud Properties:

Operation: Prior to drilling the **Canyon** (±10,400'), displace to 10.0 ppg. brine water. Mud-up at ±10,500'. Increase the mud weight to 12.0 ppg. prior to drilling the **Atoka** (±11,100').

Mud System: Additions of **POLYOL HM** will aid to inhibit and stabilize the water sensitive shales. Reduce the total hardness concentration of the mud with soda ash. Maintain viscosity/rheology with **BARAZAN® D PLUS** as recommended. Reduce the fluid loss as recommended with **DEXTRID®** prior to drilling the **Morrow** (±12,200'). Maintain pH with caustic soda. Use **BARA-THIN PLUS (DESCO)** as needed for "thinning".

Solids Control: Fully utilize at least two linear motion shakers, rig desilter, and rig desander to control drill solids. Run the finest mesh screens that will accommodate pump rates.

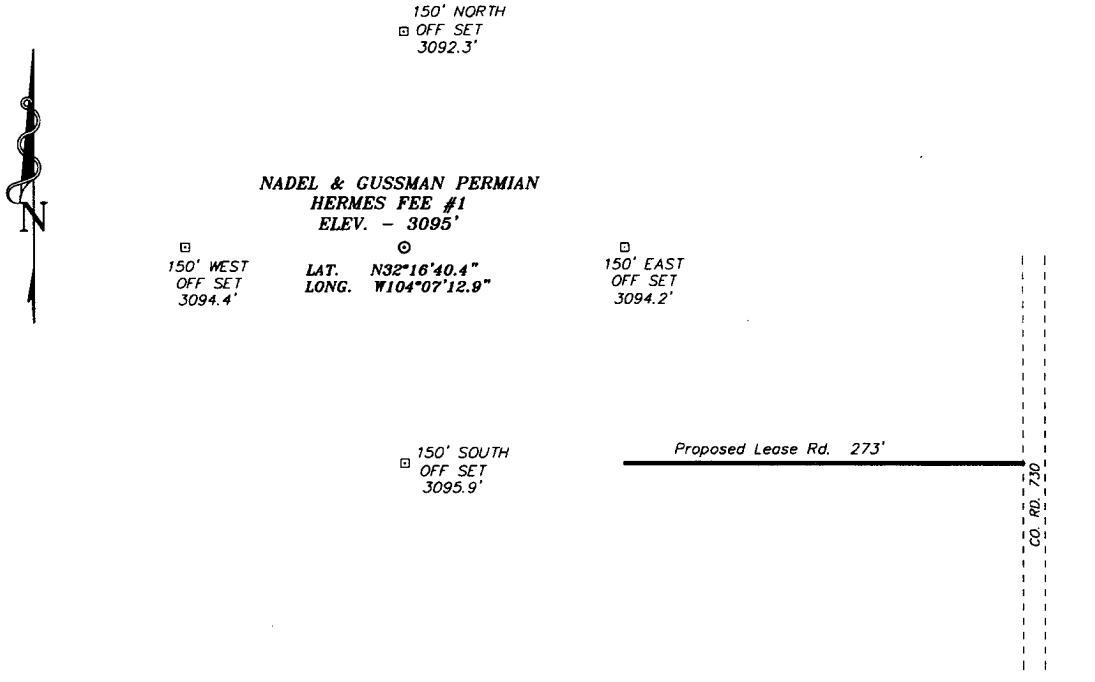
Issues: Lost Returns/Seepage - Add **HY-SEAL®, PLUG-GIT®,** or **BARO-SEAL®** for seepage or lost returns.

Hole Cleaning: Use **EZ-MUD®** and **HY-SEAL®** in sweeps.

Mud Density: The **Atoka/Morrow** may require mud weights as high as 13.0 ppg. Rapid increases in formation pressure should be anticipated below intermediate casing. The maximum mud weight in this section should be 13.0 ppg. Cuttings at the shale shaker should be monitored for signs of sloughing shale which may indicate a need for higher mud weights. Tight hole, fill on trips, torque/drag on connections, and increasing connection gas may also be an early indication of the need to raise the mud weight.

SECTION 30, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.,

EDDY COUNTY, **NEW MEXICO.**



100 0 100 200 FEET

SCALE: 1" = 100'

Directions to Location:

FROM THE JUNCTION OF US HWY 285 AND CO. RD. 714, GO WEST ON CO. RD. 714 FOR 2.0 MILES TO CO. RD. 730; THENCE SOUTH ON CO. RD. 730 FOR 0.4 MILE TO PROPOSED LEASE ROAD.

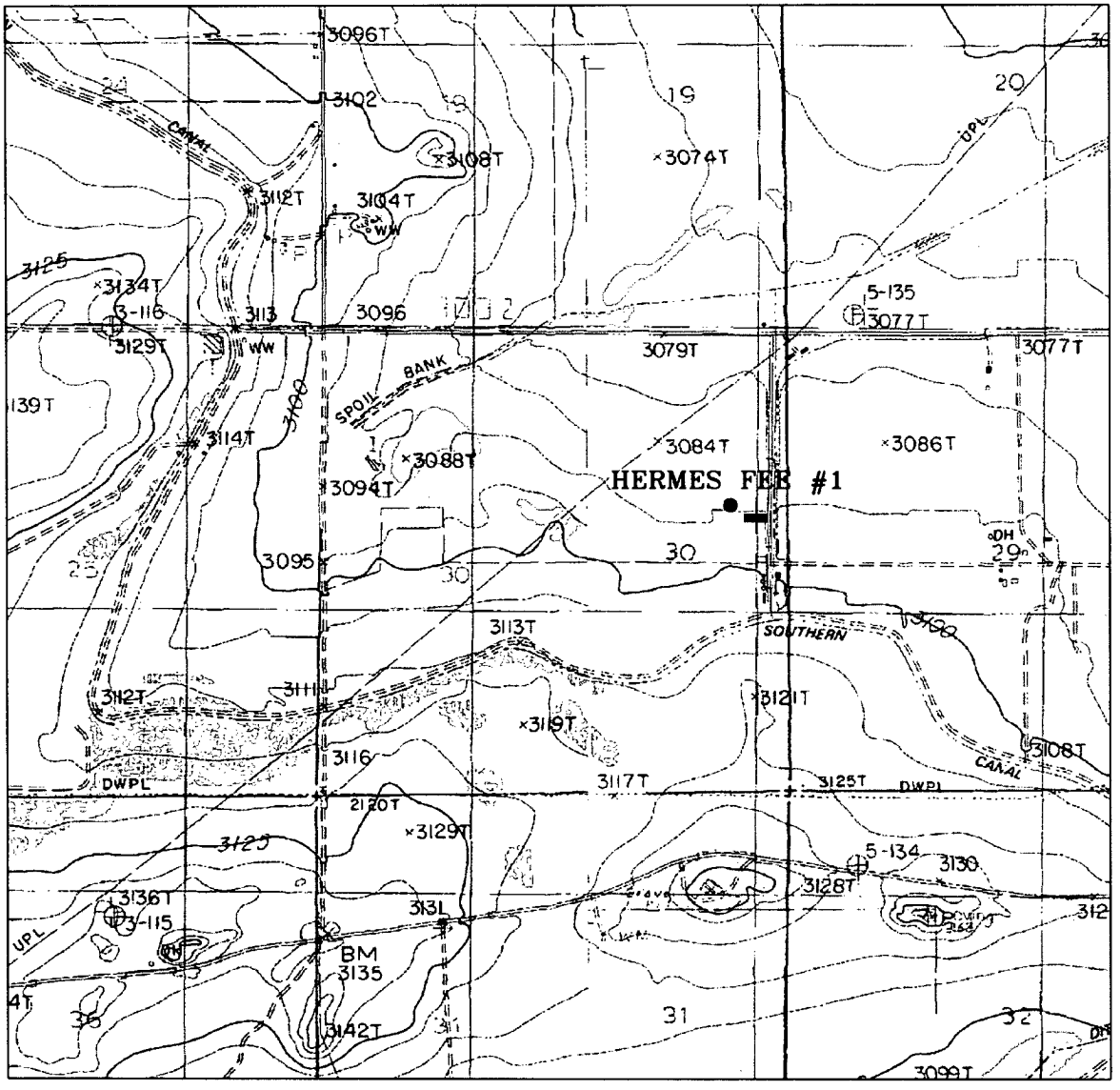
BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

NADEL AND GUSSMAN PERMIAN

REF: HERMES FEE No. 1 / Well Pad Topo

HERMES FEE No. 1 LOCATED 1980' FROM THE NORTH LINE AND 660' FROM THE EAST LINE OF SECTION 30, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

W.O. Number: 6034	Drawn By: K. GOAD		
Date: 12-12-2005	Disk: KJG #9 - 6034A.DWG	Survey Date: 12-06-2005	Sheet 1 of 1 Sheets

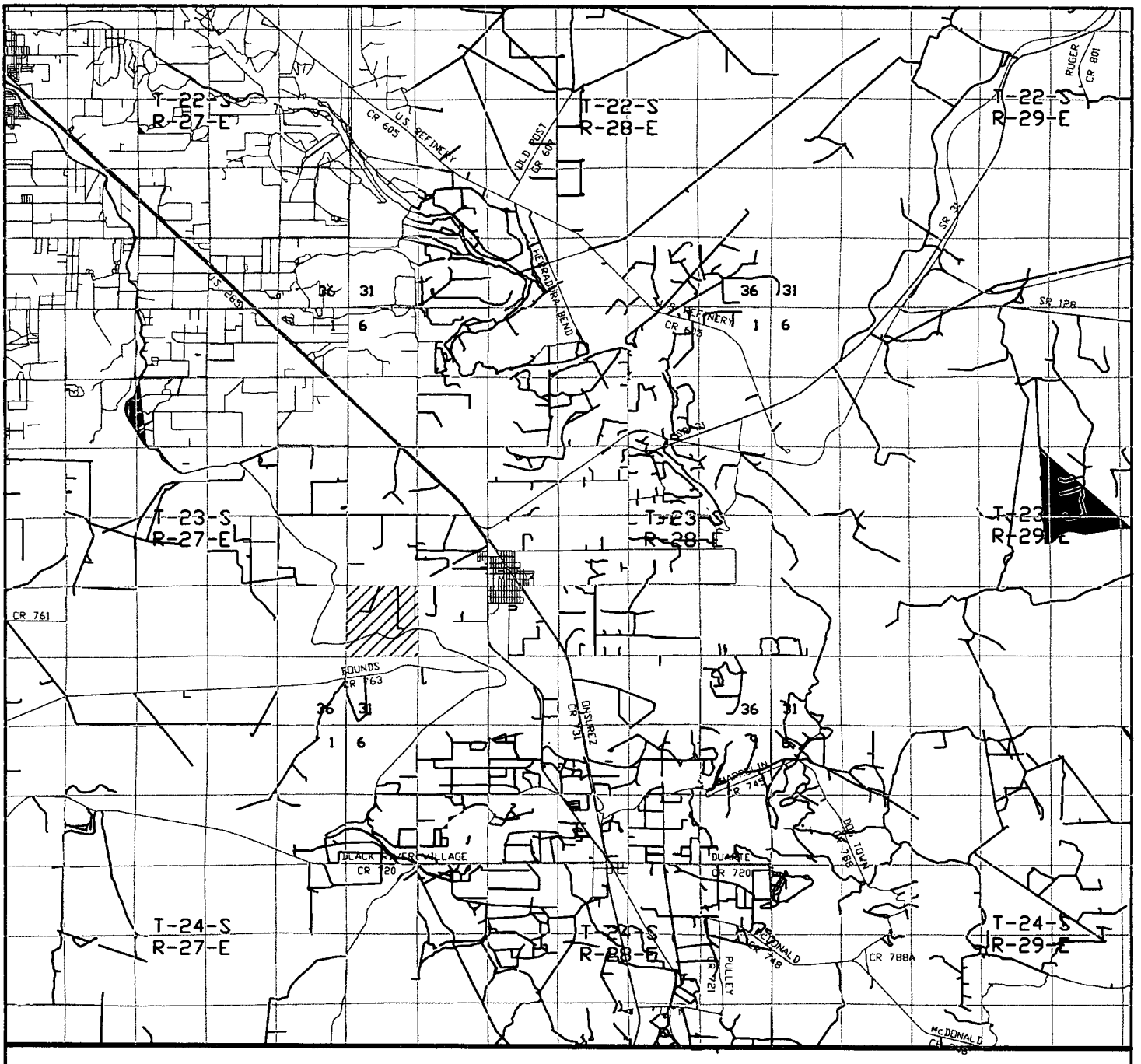


HERMES FEE #1
Located at 1980' FNL and 660' FEL
Section 30, Township 23 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

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:	6034AA - KJG #1
Survey Date:	12-06-2005
Scale:	1" = 2000'
Date:	12-12-2005

NADEL AND GUSSMAN PERMIAN, L.L.C.



HERMES FEE #1
Located at 1980' FNL and 660' FEL
Section 30, Township 23 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

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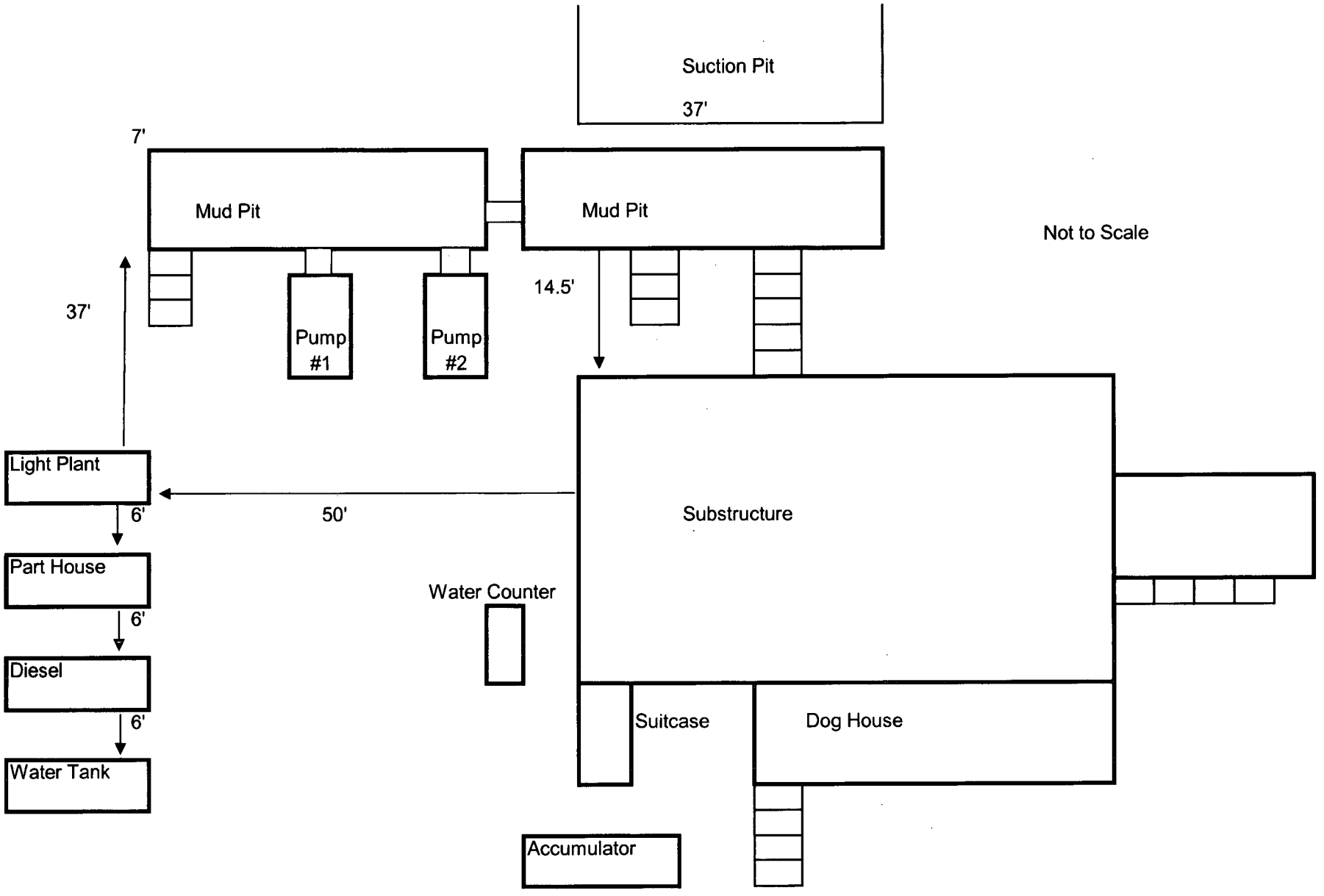
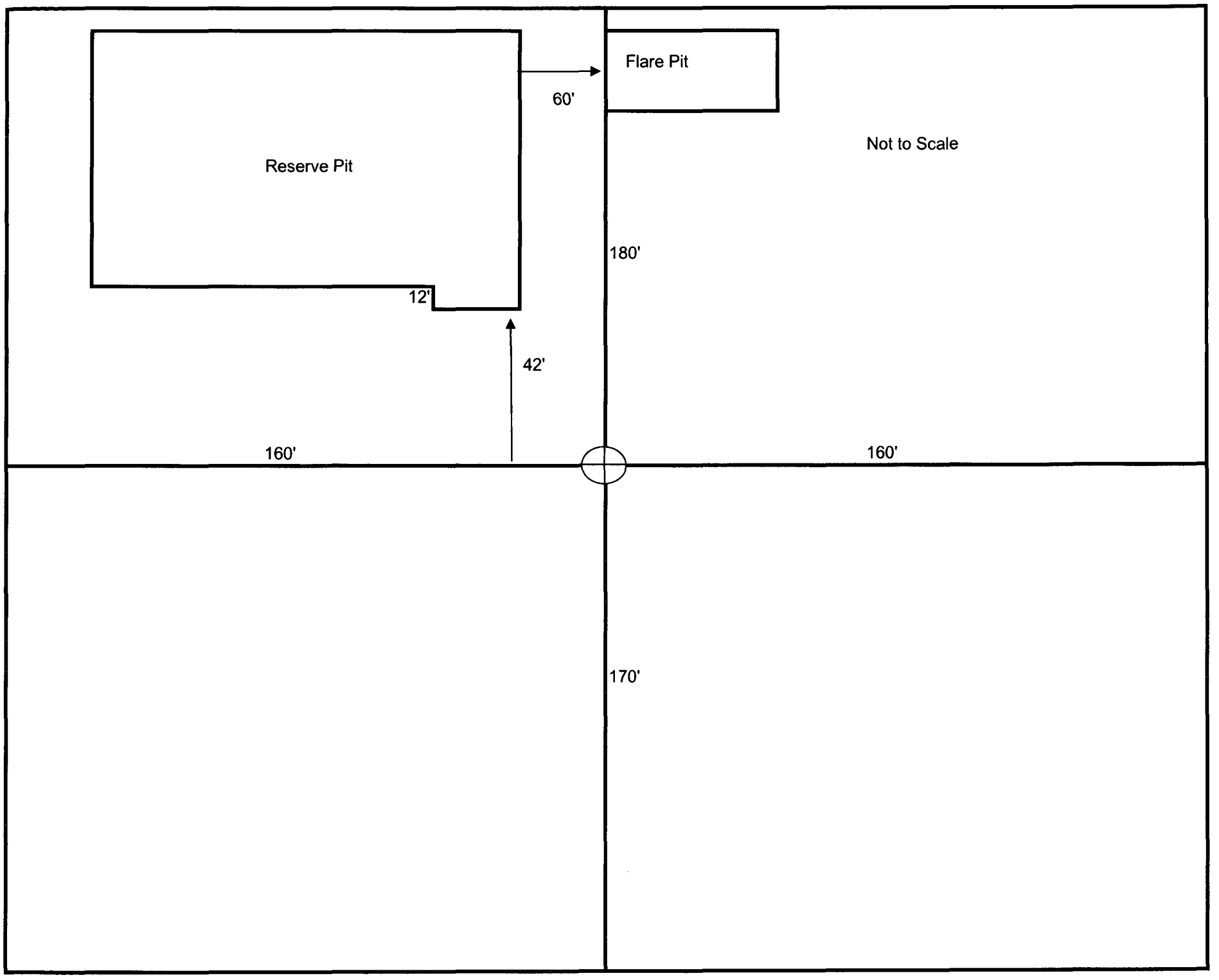
focused on excellence in the oilfield

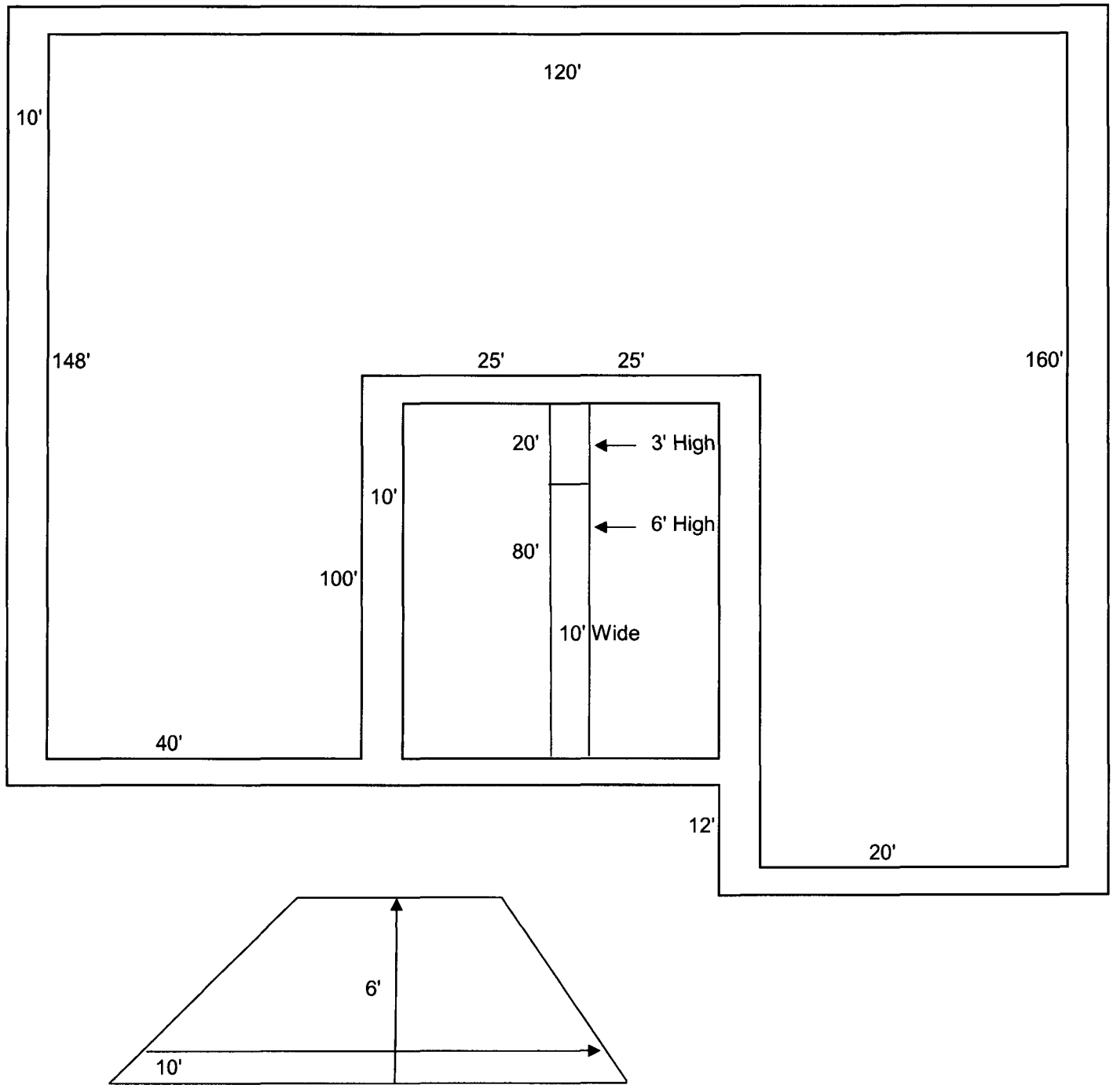
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number:	6034AA - KJG #1
Survey Date:	12-06-2005
Scale:	1" = 2 MILES
Date:	12-12-2005

NADEL AND GUSSMAN PERMIAN, L.L.C.


Suction Pit
37'
7'
Mud Pit
Mud Pit
Not to Scale
37'
14.5'
Pump #1
Pump #2
Light Plant
6'
50'
Substructure
Part House
6'
Water Counter
Diesel
6'
Suitcase
Dog House
Water Tank
Accumulator


Flare Pit
60'
Reserve Pit
Not to Scale
180'
12'
42'
160'
160'
170'



Not to Scale