

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

RECEIVED

APR 06 2005

OLUWATERIA

Form C-101
March 4, 2004

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

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

¹ Operator Name and Address NADEL AND GUSSMAN PERMIAN, L.L.C. 601 N. MARIENFELD, SUITE 508 MIDLAND, TEXAS 79701		⁴ OGRID Number 155615
³ Property Code		⁵ API Number 30 - 015 - 34862
² Property Name CARRINGTON STATE		⁶ Well No. 1

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
K	12	17-S	28-E		1,450'	SOUTH	1,600'	WEST	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

⁹ Proposed Pool 1

EMPIRE SOUTH (MORROW)

¹⁰ Proposed Pool 2

Drilling Pit Location and Other Information

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	12	17-S	28-E		1,450'	SOUTH	1,600'	WEST	EDDY
Depth to ground water 150' TO 200'				Distance from nearest fresh water well MORE THAN 1000'			Distance from nearest surface water MORE THAN 1000'		
¹¹ Work Type Code N		¹² Well Type Code G		¹³ Cable/Rotary ROTARY		¹⁴ Lease Type Code S		¹⁵ Ground Level Elevation 3,616'	
¹⁶ Multiple NO		¹⁷ Proposed Depth 10,700'		¹⁸ Formation MORROW		¹⁹ Contractor NABORS		²⁰ Spud Date +/- 05/15/05	

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	400' X 250'	450 SX	CIRC. TO SURFACE
12-1/4"	9-5/8"	40#	2,500'	1200 SX	CIRC. TO SURFACE
8-3/4"	5-1/2"	17#	10,700'	1000 SX	TOC +/- 2,500'

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.
DRILL AND COMPLETE WELL IN THE MORROW WITH A PROJECTED TD OF 10,700'.
NO H2S IS EXPECTED, BUT AN H2S CONTINGENCY LETTER IS ATTACHED.

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: 04/04/05

Phone: (432) 682-4429

OIL CONSERVATION DIVISION

Approved by:

TIM W. GUM

Title:

DISTRICT II SUPERVISOR

Approval Date:

APR 17 2005

Expiration Date:

APR 17 2006

Conditions of Approval:

Attached ☐

Operator to set surface casing above Salado.

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Energy Minerals and Natural Resources

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

Form C-144
March 12, 2004

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 Telephone: (432) 682-4429 e-mail address: joshf@naguss.com		
Address: 601 N. Marienfeld, Suite 508 Midland, TX 79701		
Facility or well name: CARRINGTON STATE # 1 API #: 30-015-34062 U/L or Qtr/Qtr: K Sec: 12 T: 17S R: 28E		
County: Eddy Latitude: N32° 50' 49.2" Longitude: W104° 08' 00.4" NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/> Surface Owner Federal <input type="checkbox"/> State <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>		
Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness 12 mil Clay <input type="checkbox"/> Volume 20,000 bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. APR 06 2005 COURTESIA	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) 0 (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (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 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) 0 (0 points)
	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: 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.

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 <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	
Date: 04/04/05	
Printed Name/Title Josh Fernau, Staff Engineer	Signature <i>Josh Fernau</i>
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: APR 13 2005	
Date: _____	
Printed Name/Title <i>Wild</i>	Signature <i>Wild</i>

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811 South First, Artesia, NM 88210

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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

Form C-102
Revised March 17, 1999

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

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 CARRINGTON STATE	Well Number 1
OGRID No.	Operator Name NADEL AND GUSSMAN PERMIAN	Elevation 3616'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	12	17 S	28 E		1450	SOUTH	1600	WEST	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 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>OPERATOR CERTIFICATION</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 Fernau</u> Signature</p> <p><u>Josh Fernau</u> Printed Name</p> <p><u>Staff Engineer</u> Title</p> <p><u>04/04/05</u> Date</p>
	<p>SURVEYOR CERTIFICATION</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>FEBRUARY 2, 2005</p> <p>Date Surveyed</p> <p><u>ARY L. JONES</u> Signature & Seal of Professional Surveyor</p> <p><u>ARY L. JONES</u> Professional Surveyor</p> <p>7977</p> <p>7977</p> <p>7977</p>

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

04/04/05

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

Re: Carrington State #1
1,450' FSL, 1,600' FEL
UL K, Sec. 12-T17S-R28E
Eddy, NM
Rule 118 H2S Exposure

Dear Mr. Arrant,

The closest home to our location is +/-2,000'. The contact number for that home is Lewis Derrick (505) 365-6927. 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.

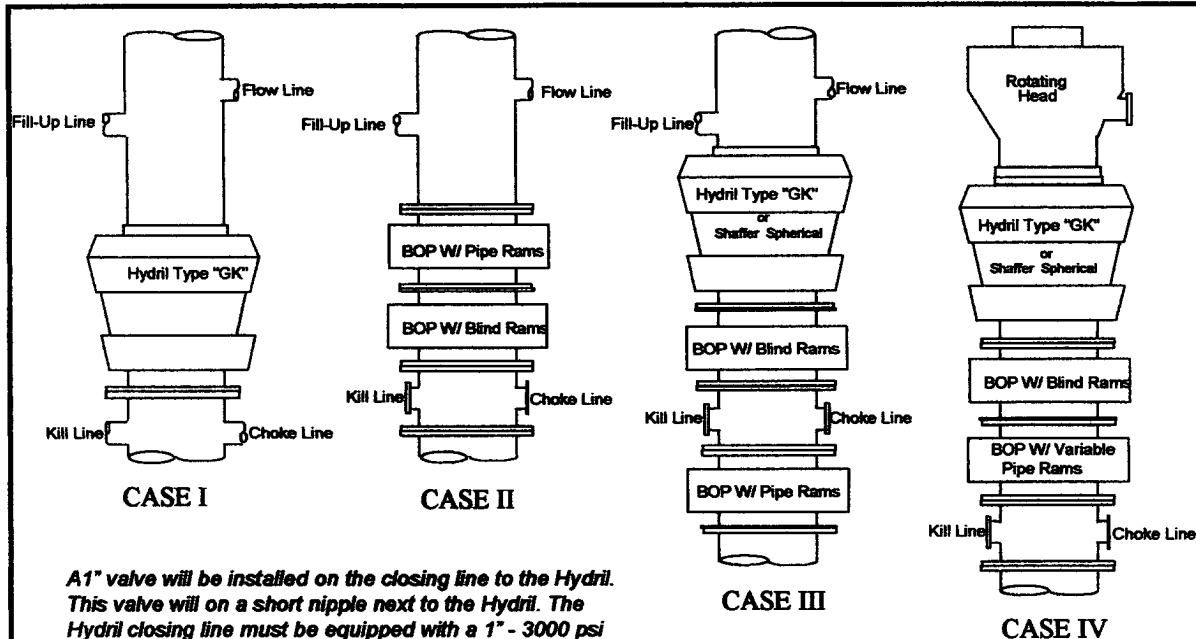
Please contact me if you have any additional questions.

Sincerely,

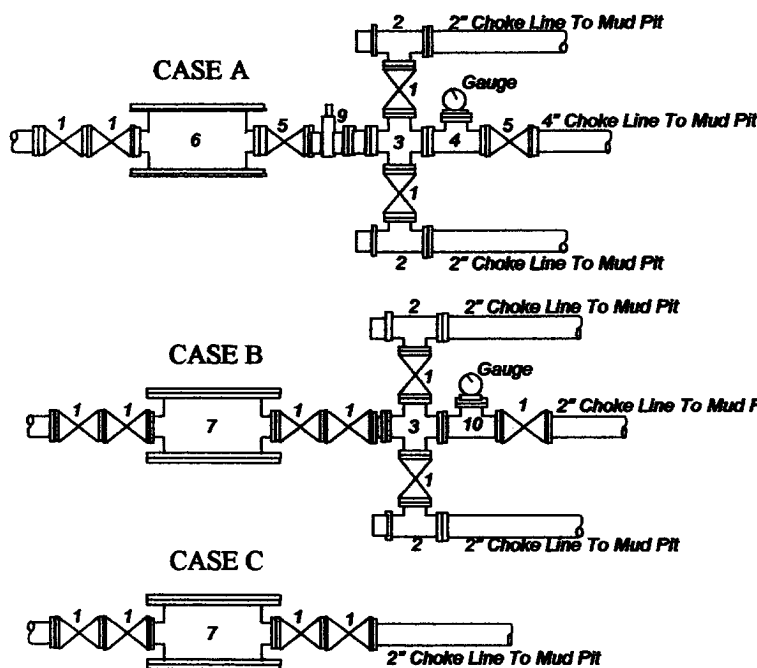


Josh Fernau
Staff Engineer

Nadel and Gussman Permian Carrington Stat# 2 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
15"	IV	3000#	A
11'	IV	5000#	A

***Rotating head required**

Bradenhead : _____
Mfr. : _____
Size: _____ Type: _____

04/04/05
John Fernan

Legend

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



**Mr. Josh Fernau
Nadel & Gussman, LLC
601 N. Marienfield St., Suite 508
Midland, Texas 79701**

February 28, 2005

Dear Mr. Fernau,

The enclosed Suggested Drilling Fluids Program is based on data obtained from the Operator and our experience in the area for your upcoming **Carrington State #1** well, to be drilled to 10,600'. The prospect is located in Section 12, Township 17S, Range 28E of Eddy County, New Mexico.

We suggest the well surface hole be drilled with **F. Water Gel Mud**, the intermediate hole will be drilled with **Brine/Sweeps**, the intermediate interval will be drilled with **Cut Brine Water All ZAN - PAC Polymer System**,

Wells drilled in this area have experienced numerous problems such as lost circulation, Salt-Anhydrite stringers, deviation, swelling formations, sloughing shale, CO2 gas, formation damage and abnormal pressures.

Without a significant amount of the above problems we believe the well can be drilled in **25 days** for an estimated mud cost of [REDACTED] Material will be delivered by LDI (Lone Star Distribution, Inc.) which is located in Midland, Texas and Hobbs, New Mexico.

Before selecting your Drilling Fluids Vendor we hope you will consider the following:

1. Our proposed Mud Engineers: Charlie Branch & JT Gilkey. Experience – see résumé's
2. ADF's Drilling Fluid Proposal and our Technical Support – Patterson, Kaiser
3. **Our experience on over 70 deep wells using a Weighted Xanthan Polymer Mud**
4. Quality products at a fair market price, delivered by LDI Distribution
5. Our dedication, innovation, and flexibility in helping Operators reduce total well cost

The proposed Mud Engineers are **Charlie Branch** and **JT Gilkey** depending on availability, each Engineer has recent Mentone deep hole experience with a Weighted Polymer Mud System their resumes are included.

Should you have any questions regarding this proposal, please contact Shawn Savage at 432-556-8008 or Wayne Patterson at 432-770-9792.

Our goal is to help you drill the proposed well safely and economically while minimizing formation damage to all potential producing zones.

Sincerely,

Wayne Patterson

Estimated Well Geologic Formation Tops Potential Geological Hazards

Formation	GL (ft)	Potential Geological Hazards
Yates	± 476'	Anhydrite, Wash Outs, Ledges, Corrosion
Queen	± 1,218'	Wash Outs, Ledges, Deviation Problems
Grayburg	± 1,572'	Seepage
San Andres	± 2,072'	Seepage, Depleted Zones
Tubb	± 4,824'	Seepage
Abo	± 6,016'	Swelling, Tight Hole, Stuck Pipe, Raise Chlorides to 75K
Wolfcamp	± 6,716'	Seepage, Wash Outs, Gas
Cisco	± 7,682'	Seepage
Strawn	± 8,912'	Gas, Water Sensitive
Atoka	± 9,513'	Hydratable, Sloughing, Pressure Hole Stability
Morrow	± 9,628'	Gas, Formation Damage, Seepage
Morrow L	± 9,828'	Gas, Formation Damage, Seepage
Missipian	± 10,104'	Gas, Formation Damage, Seepage
Estimated TD	± 10,600'	

*** The following suggested drilling fluid program is based on data supplied by the operator and our experience and offset data in the area.**

“Drilling hazards may result due to near pressure transition or regression intervals near casing points; also some interval may be missing due to faulting.”

Hole Size and Casing Program

Set 13 3/8" Casing	Drill 17 1/2" Hole	0 - 400'
Set 9 5/8" Casing	Drill 12 1/4" Hole	400' – 2,400'
Set 5 1/2" Casing	Drill 8 3/4" Hole	2,400' – 10,600'

Suggested Drilling Fluid Properties						
Depth Feet	Mud Wt PPG	Viscosity Sec/100cc	Y. Point #/100 Ft³	Fluid Loss cc	Water Phase Salinity	Products Mud Type
0 - 400'	8.5 - 9.5	35 - 45	7 - 15	NC	Fresh Water	GEL, Gel Ex Lime, Paper
400' - 2,400'	10.0	28 - 32	0 - 2	N/C	Brine	Poly Plus Paper Sweeps Lime
2,400' - 8,900'	8.8 - 9.2	28 - 30	0 - 2	N/C	Cut Brine	Poly Plus Drill Paper Lime, LCM
8,900 - 10,600'	9.2 – 10.0	36 - 48	10 - 20	6 - 8	Cut Brine	ALL ZAN – PAC ALL SHALE HIB

The above suggested properties should be modified as needed to maintain a stable Well Bore and to control abnormal pressure while drilling and tripping.

Interval 0' – 400'
Drill 17 1/2" Hole and Set 13 3/8" Casing @ 400'

Suggested Drilling Fluid Properties				
Interval Depth (feet) (MD/TVD)	Mud Weight (lb / Gal)	Viscosity (sec / 1000 cc)	Plastic Viscosity (cps)	Yield Point (lb / 100 ft ²)
0' - 400'	8.5 - 9.2	35 - 45	5 - 8	7 - 15
pH	Drill Solids (% by volume)	Chloride (ppm)	Water Phase	Total Hardness (mg/L)
9.5	<4	<6,000	Fresh	<200
Potential Problems: Hole cleaning, Lost Circulation, Deviation, and Solids Control				

Suggested Drilling Fluid Maintenance Gel Spud Mud

To build Fresh Water spud mud, add SODA ASH to reduce hardness below 200 PPM. Add Fresh Water Gel 15:1 ratio and Gel Ex slowly to working system to build a 35 - 45 second viscosity and maintain a Yield Point of 7-15 for hole cleaning. Run solids control equipment to control solids. Monitor shaker screen and screen up as needed to control solids without flooding the shaker. Add Drilling Paper to control seepage and aid in hole cleaning. Add Lime to provide pH for corrosion control and to help flocculate drill solids.

Note: Circulation losses may be encountered while drilling surface hole. Should total losses be encountered, add up to 20 #bbl LCM (Drilling Paper, Fiber-Seal, All Seal, and Fiber Plug) to a 100 bbl pill and spot opposite the thief zone, if unsuccessful "dry drill" using sweeps to keep hole clean until casing point.

Corrosion Control: Slug the drill pipe every 4 hours with 2 ½ gallons of All Hib FA 30 and 2 ½ gallons of diesel, also slug drill pipe before and after trips with same 5 gallon mixture

Est. Interval Time: 3 days

Est. Interval Cost: [REDACTED]

Interval 400' – 2,400'
Drill 12 1/4" Hole and Set 9 5/8" Casing @ 2,400'

Suggested Drilling Fluid Properties				
Interval Depth (feet) (MD/TVD)	Mud Weight (lb / Gal)	Viscosity (sec / 1000 cc)	Plastic Viscosity (cps)	Yield Point (lb / 100 ft ²)
400' - 2,400'	10.0	28 - 32	0 - 2	0 - 2
pH	Drill Solids (% by volume)	Chloride (ppm)	Water Phase	Fluid loss (ml/30min)
9.5 - 10.0	<1	<180,000	Brine	NC
Potential Problems: <i>Hole cleaning, Seepage, Salt ringers, Deviation, Corrosion</i>				

Suggested Drilling Fluid Maintenance Sweeps and Paper

Drill out from under surface with Fresh Water and then change over to BRINE to minimize washing out Salts and Anhydrite formations. Add 3 sacks of LIME to 1 sack of CAUSTIC SODA to maintain a 9.5 - 10.0 pH for corrosion control and to help flocculate drill solids. Poly Plus (Liquid PHPA) should be added (2 - 3 GALS / 100') at the pump suction to aid in hole cleaning and to flock drill solids to keep the drill water clean. Pump Drilling Paper "sweeps" every 100' or as needed to control seepage and to aid in hole cleaning.

Note: Circulation losses may be encountered while drilling intermediate hole. Should total loss be encountered, add up to 20 #bbl LCM (Drilling Paper, Fiber-Seal, All Seal, and Fiber Plug) to a 100 bbl pill and spot opposite the thief zone.

Corrosion Control: Maintain a 10 pH and slug the drill pipe every 4 hours with 2 ½ gallons of All HIB FA 30 and 2 ½ gallons of diesel, also slug drill pipe before and after trips with same 5 gallon mixture. Add 10 gallons per day of ALL HIB 370 to minimize effects of oxygen. Install coupon in Kelly saver sub and remove and analyze after 100 hrs.

Est. Interval Time: 4 days

Est. Interval Cost: 

Nadel & Gussman, LLC

Carrington State #1

Eddy County, New Mexico

Interval 2,400' – 8,900'
Drill 8 3/4" Mud up by Top of Strawn

Suggested Drilling Fluid Properties				
Interval Depth (feet) (MD/TVD)	Mud Weight (lb / Gal)	Viscosity (sec / 1000 cc)	Plastic Viscosity (cps)	Yield Point (lb / 100 ft ²)
2,400' – 8,900'	8.8 - 9.2	28 - 30	0 - 1	0 - 2
pH	Drill Solids (% by volume)	Chloride (ppm)	Water Phase	Fluid loss (ml/30min)
9.5 – 10.0	<1	<100,000	Cut Brine	NC
Potential Problems: Lost Circulation, Deviation, Hole cleaning, Pressure, H2S Gas, Corrosion				

Suggested Drilling Fluid Maintenance Sweeps and Paper

Drill out with Cut Brine circulating through the reserve pit. Dump as much cement contaminated mud as possible in reserve pit. Add 3:1 ratio LIME-CAUSTIC SODA in this interval to maintain a pH of 9.5 – 10.0 or higher for corrosion control and for acid gas control. Poly Plus (PHPA flocculant) functions in fresh or brine water, it is absorbed on shale and clays to provide hole stability and will flock drill solids to keep drill water ultra clean. Poly Plus should be added (2 – 3 gals / 100') through the chemical tank on the pump suction to provide sweeps and help keep the reserve water clean and free of drilled solids. Drilling Paper and Poly Plus "sweeps" are recommended every 100' for as needed for hole cleaning and to minimize seepage.

Prior to drilling the ABO Formation (water sensitive) at 6,000', to provide inhibition add Brine to increase the Chlorides to 70K ppm. Also adding 2 – 3 drums of SURFAK S surfactant will minimize ABO swelling, tight hole, and will improve drill rates

Note: Circulation losses may be encountered while drilling this section. Should total loss be encountered, add up to 20 #bbl LCM (Drilling Paper, Fiber-Seal, ALL SEAL, and ALL CASE) to a 100 bbl pill and spot opposite the thief zone

Corrosion Control: Maintain a 10 pH and slug the drill pipe every 4 hours with 2 ½ gallons of All Hib FA 30 and 2 ½ gallons of diesel, also slug drill pipe before and after trips with same 5 gallon mixture. Add 5 gallons per day of ALL HIB 370 to minimize effects of oxygen. Install coupon in Kelly saver sub, remove and analyze after 100 hrs. Have All H2S 320 on location and to control H2s Gas.

Est. Interval Time: 10 days**Est. Interval Cost:** 



Nadel & Gussman, LLC

Carrington State #1

Eddy County, New Mexico

Interval 8,900' – 10,600'

Drill 8 3/4" Hole and Set 5" Casing @ 10,600'

Suggested Drilling Fluid Properties				
Interval Depth (feet) (MD/TVD)	Mud Weight (lb / Gal)	Viscosity (sec / 1000 cc)	Plastic Viscosity (cps)	Yield Point (lb / 100 ft ²)
8,900'-10,600'	9.2 – 10.0	36 - 48	8 - 16	10 - 20
pH	Drill Solids (% by volume)	Chloride (ppm)	Water Phase	Fluid loss (ml/30min)
9.5	<4	<180,000	Cut Brine	5 - 8
Potential Problems: Pressure, formation damage, corrosion, hole stability, seepage				

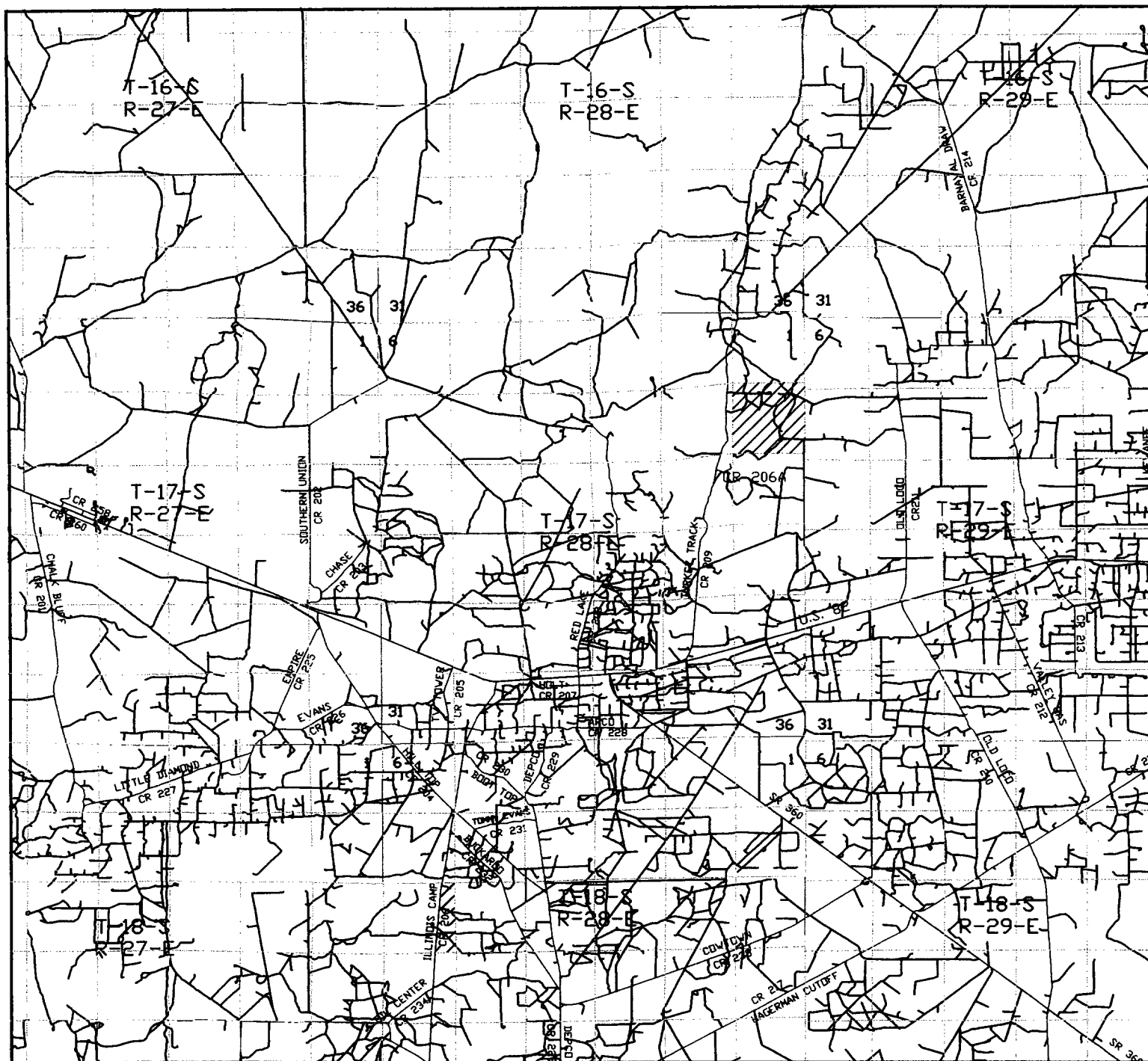
Suggested Drilling Fluid Maintenance ALL ZAN POLYMER System

MUD UP BY TOP OF THE STRAWN AT 8,900' by adding SODA ASH to reduce hardness below 200ppm, then add 1 #bbl of ALL ZAN Polymer and ½ #bbl ALL PAC Polymer to build a 40 Viscosity, 12 Yield Point, and to control the Fluid Loss below 8cc. To minimize surge and swab pressures maintain the Yield Point below 16. Run Surge and Swab program to determine trip rate and pay attention to the ECD which should be maintained at a maximum of .4#/Gal over the mud weight. This will minimize excessive pressure and losses in potential permeable producing zones. For seepage or losses mix only Acid Soluble Lost Circulation Materials such as Ca. Carbonate and All Zone Seal to minimize formation damage. Run solids control equipment and Fine Mesh Shaker Screens (210) or as fine as possible without creating shaker flooding. Add Soda Ash and Caustic Soda to maintain a 9.5 pH to minimize corrosion and IDB 60 Biocide to prevent bacterial growth. To increase the mud weight add 10 pound Brine to adjust the mud weight to provide a safe overbalance and stable hole conditions. Keep the hole full at all times.

Corrosion Control: Maintain a 9.0 pH and slug the drill pipe every 4 hours with 2 ½ gallons of All Hib FA 30 and 2 ½ gallons of diesel, also slug drill pipe before and after trips with same 5 gallon mixture. Install coupon in Kelly saver sub and remove and analyze after 100 hrs. Have All H2S 320 on location to treat H2S Gas

Est. Interval Time: 8 days

Est. Interval Cost: [REDACTED]



CARRINGTON STATE #1

Located at 1450' FSL and 1600' FWL

Section 12, Township 17 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

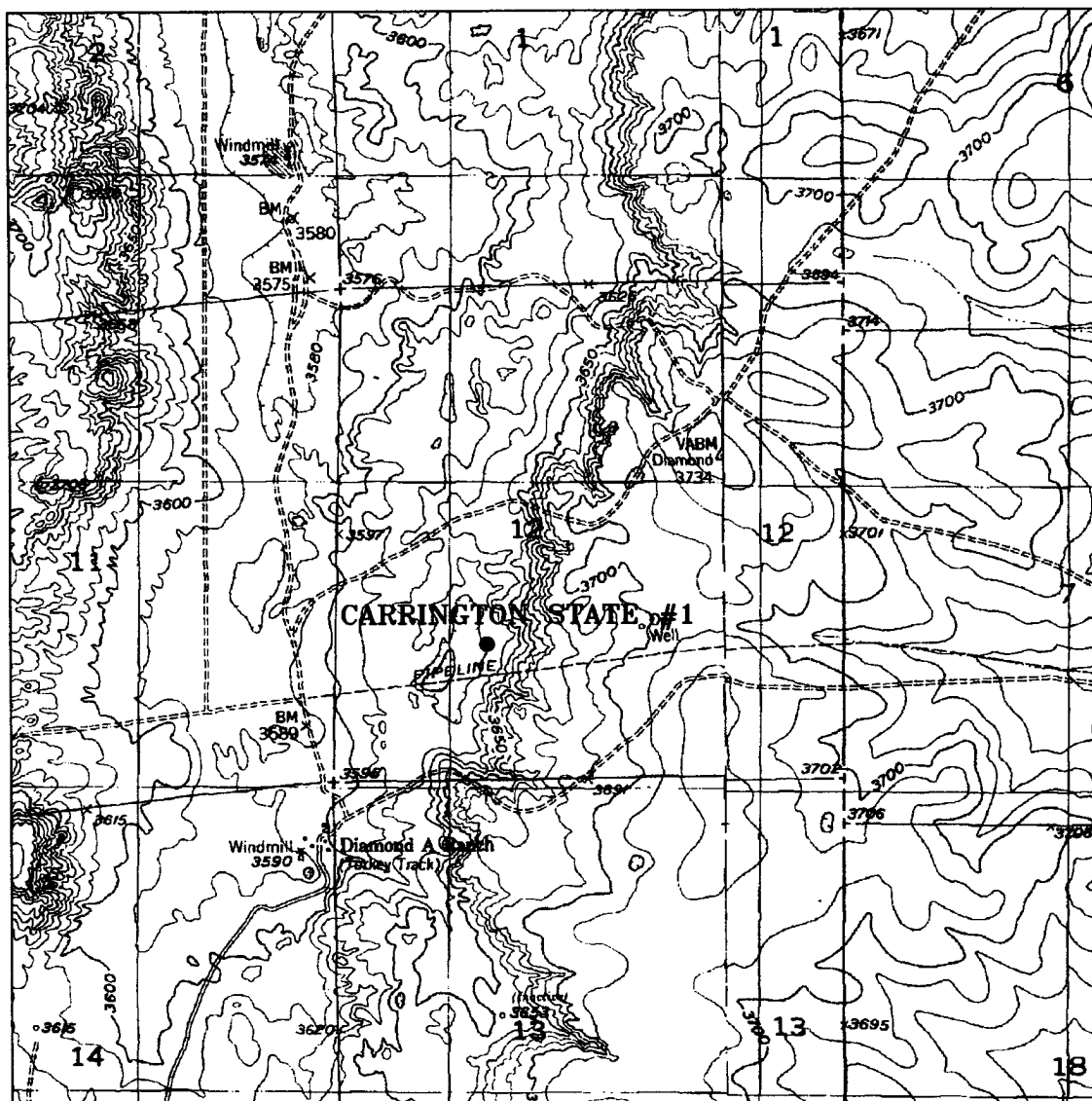
W.O. Number: 5168AA - KJG #1

Survey Date: 03-02-2005

Scale: 1" = 2 miles

Date: 03-03-2005

NADEL AND
GUSSMAN PERMIAN,
L.L.C.



CARRINGTON STATE #1

Located at 1450' FSL and 1600' FWL
 Section 12, Township 17 South, Range 28 East,
 N.M.P.M., Eddy County, New Mexico.



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: 5168AA - KJG #1

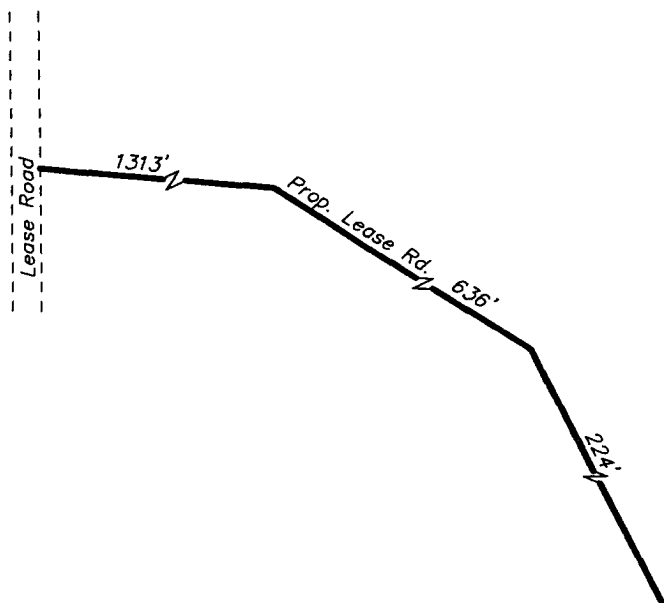
Survey Date: 03-02-2005

Scale: 1" = 2000'

Date: 03-03-2005

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

SECTION 12, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



150' NORTH
OFF SET
3615.4'
□

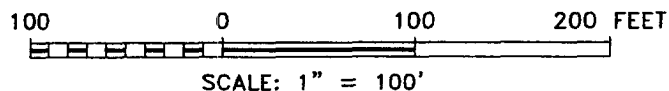
NADEL & GUSSMAN PERMIAN
CARRINGTON STATE #1
ELEV. - 3616'

○
LAT. N32°50'49.2"
LONG. W104°08'00.4"

□ 150' WEST
OFF SET
3608.8'

□ 150' EAST
OFF SET
3623.6'

150' SOUTH
OFF SET
3612.3'
□



Directions to Location:

FROM LOCO HILLS, GO WEST ON US HWY 82 FOR
9.3 MILES TO CO. RD. 209; THENCE NORTH CO. RD.
209 FOR 3.3 MILES TO PROPOSED LEASE ROAD.

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

W.O. Number: 5168

Drawn By: K. GOAD

Date: 03-03-2005

Disk: KJG #9 - 5168A.DWG

NADEL AND GUSSMAN PERMIAN

REF: CARRINGTON STATE No. 1 / Well Pad Topo

CARRINGTON STATE No. 1 LOCATED 1450' FROM
THE SOUTH LINE AND 1600' FROM THE WEST LINE OF
SECTION 12, TOWNSHIP 17 SOUTH, RANGE 28 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 03-02-2005

Sheet 1 of 1 Sheets

