

887

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

K-20
J.M. Oil Co. Dist. 2
801 W. Grand Avenue
Albuquerque, NM 88210

CONTACT RECEIVING
OFFICE PHONE NUMBER
FACSIMILE NUMBER
(Other instructions on
reverse side)

BLM Roswell District
Modified Form No.
NM060-3160-2

30-015-32476

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL

GAS

SINGLE

MULTIPLE

WELL ☒

WELL ☐

OTHER

ZONE ☒

ZONE ☐

2. NAME OF OPERATOR

STRATA PRODUCTION COMPANY

3a. Area Code & Phone No.

505-622-1127

5. LEASE DESIGNATION AND SERIAL NO.

NM-0554221

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

10735
Nash Unit

8. FARM OR LEASE NAME

Nash Unit

3. ADDRESS OF OPERATOR

P. O. Box 1030, Roswell, New Mexico 88202-1030

10. FIELD AND POOL, OR WILDCAT

Nash Draw Brushy Canyon

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

At surface

S.L. 10' FSL & 175' FWL

At proposed prod. zone

B.H.L. 2650' FSL & 2250' FWL Section 11-23S-29E

11. SEC., T., R. M., OR BLK.
AND SURVEY OR AREA

Section 12-23S-29E

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

9 miles east of Loving, New Mexico

12. COUNTY OR PARISH

Eddy

13. STATE

NM

15. DISTANCE FROM PROPOSED *

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

2250'

16. NO. OF ACRES IN LEASE

880 Lse/5123 Unit

17. NO. OF ACRES ASSIGNED

TO THIS WELL

80.00

R-111-P-POTASH

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED

OR APPLIED FOR, ON THIS LEASE, FT.

300'

19. PROPOSED DEPTH

6800' TVD

20. ROTARY OR CABLE TOOLS

Rotary

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

2983' GR

Carlsbad Controlled Water Basin

22. APPROX. DATE WORK WILL START*

October 15, 2002

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	H-40	STC NEW	310' 400'	Circ to Surface
11"	8 5/8"	32#	J-55	LTC NEW	3110'	Circ to Surface
7 7/8"	5 1/2"	17#	N-80	LTC NEW	6800' TVD 9950' MD	Circ to Surface

Strata Production Company proposes to drill to a depth sufficient to test the Delaware formation. If productive, 5 1/2" casing will be set. If non-productive, the well will be plugged and abandoned in a manner consistent with Federal Regulations. Specific programs as set out in Onshore Oil & Gas Order #1 are outlined in the following attachments:

NSL
4782

NMOCD Form C-102 Well Location and Acreage Dedication Plat
Hole Prognosis
Surface Use and Operating Plan
Exhibit "A" Equipment Description
Exhibit "B" Planned Access Roads
Exhibit "C" One Mile Radius Map
Exhibit "D" Drilling Rig Layout Plan
Exhibit "E" Vertical Plan View
Exhibit "F" Horizontal Plan View
Notifications to Area Potash Leaseholders

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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

Henry M. Britt

TITLE

Production Records

DATE

08/23/02

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

/S/ RICHARD A. WHITLEY

TITLE

STATE DIRECTOR

DATE

OCT 08 2002

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL FOR 1 YEAR

*See Instructions On Reverse Side

F3160-3.WK1

District I
1625 N. Franch 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 & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, N M 87505

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
		NASH DRAW UNIT			33
OGRID No.		Operation Name			Elevation
021712		STRATA PRODUCTION			2983

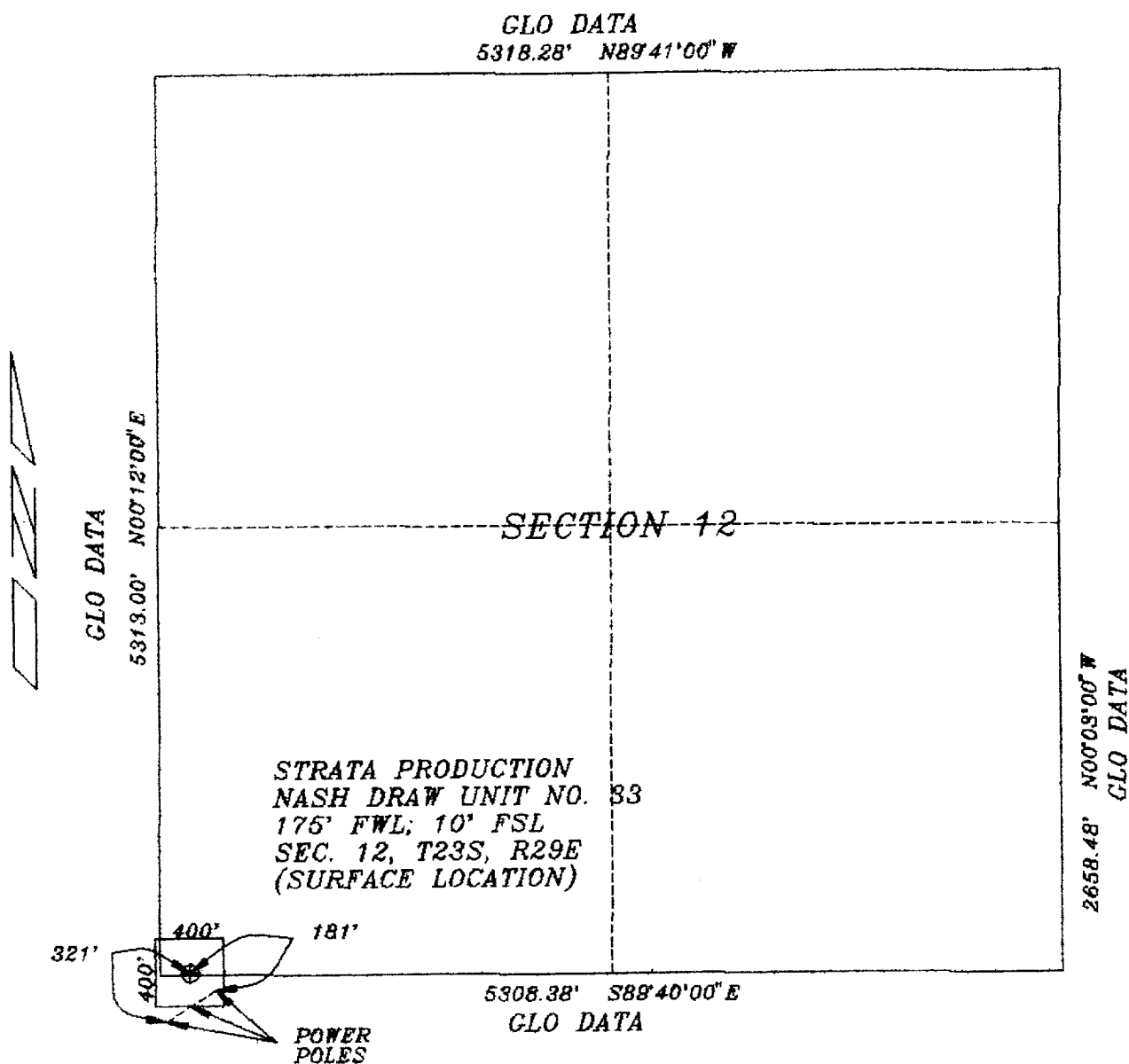
Surface Location									
UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
M	12	23-S	29-E		10	SOUTH	175	WEST	EDDY

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
K	11	23-S	29-E		2650	SOUTH	2250	WEST	EDDY
Dedicated Acres		Joint or Infill		Consolidation Code		Order No.			
80/60									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				OPERATOR CERTIFICATION I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.	
				Signature <i>Kelly M. Britt</i> Printed Name <i>Kelly M. Britt</i> Title <i>Production Analyst</i> Date <i>8-22-02</i>	
				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 SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.	
				AUGUST 6, 2002 Date of Survey Signature and Seal of Professional Surveyor Certificate Number	

SKETCH SHOWING LOCATION OF EXISTING POWER



Scale 1" = 1000 ft

PREPARED BY: DAN R. REDDY NM PE&PS
PREPARED FOR: STRATA PRODUCTION
DATE: AUGUST 7, 2002

HOLE PROGNOSIS
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
STRATA PRODUCTION COMPANY
NASH UNIT #33 WELL
10' FSL & 175' FWL
SECTION 12-23S-29E
EDDY COUNTY, NEW MEXICO

In conjunction with Form 3160-3, Application for Permit to Drill, Strata Production Company submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Geologic Markers:

Rustler	Surface	"F-2" Sand	5776'
Salado	260'	"H" Sand	6178'
Castile	1730'	"K" Sand	6640'
Bell Canyon	3110'	"L" Sand	6770'
Cherry Canyon	4110'	Bone Spring	6860'
Brushy Canyon	5190'	TD - TVD	6860'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Surface	150'	Fresh Water
Delaware	3110' - 6860'	Oil or Gas

No other formations are expected to produce oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 310' and circulating cement back to surface. Shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across the zone by inserting a cementing stage tool into the 5 1/2" production casing which will be run at TD.

HOLE PROGNOSIS

NASH UNIT #36

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4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight, Grade, Jt. Cond, Type</u>
17 1/2"	0 - ^{400'} 310'	13 3/8"	48#, H-40, ST&C, New
11"	0-3110'	8 5/8"	32#, J-55, LT&C, New
7 7/8"	0 - TD	5 1/2"	17#, N-80, LT&C, P-110, Hydril 513, New

Cementing Program:

Surface Casing: 13 3/8" casing will be set at approximately ^{400'}~~310'~~ and cemented with approximately 425 sacks of Premium Plus cement with 2% CaCl and additives per sack. The amount may be adjusted depending upon the fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Intermediate Casing: 8 5/8" casing will be set at approximately 3110' and cemented with approximately 800 sacks of 35/65 Poz "C" with 6% gel, 10# salt and additives per sack, and 200 sacks Class "C" with 2% CaCl and additives per sack. The amount may be adjusted dependent upon fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Production Casing: If appropriate, 5 1/2" casing will be set at Total Depth. Strata utilizes cement in sufficient quantities to circulate cement to the surface in three (3) stages. The first stage to be cemented with approximately 600 sacks 50/50 Poz "C" with 3% salt and additives per sack. The second stage to be cemented with approximately 400 sacks of 50/50 Poz "C" with 5% salt and additives per sack. The third stage of be cemented with approximately 725 sacks 50/50 Poz "C" with 5% salt and additives per sack. D.V. tools will be placed at +/-6400' and +/-4450'.

Drilling Program

The Nash Draw #33 is designed to be a deviated/horizontal well. After setting the 8 5/8" intermediate casing at +/-3100', steering tools will be used to build angle at 5.72 degrees per 100' to 26.1 degrees

from vertical. This angle will be maintained to +/-6624'(TVD), angle will be built at the rate of 14.3 degrees per 100 feet until the wellbore is horizontal. At the point the wellbore is horizontal the BHL will be approximately 1950' from the surface location. The horizontal section will continue for +/-2202.3'. The BHL will be approximately 4153.3' from the surface location in a northwesterly direction with a bearing of 309.48 degrees. The MD will be +/-9950' and the TVD will be +/-6800'. The target for the BHL is 2650' FSL & 2250' FWL Section 11-T23S-R29E.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown on Exhibit "A" will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOPs will be nipped up on the 13 3/8" surface casing and used continuously until TD is reached. All BOPs and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 psi and the hydril to 70% of rated working pressure (2100 psi).

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

0' to ^{400'} 310'	Fresh water with lime and gel with paper and fiber for seepage will be used for drilling purposes.
^{400'} 310' to 3110'	Saturated brine water purchased from commercial sources with paper and fiber for seepage will be utilized.
3110' to 5100'	3% KCL water with 20-50 PPM Nitrates, caustic for PH control and

paper for seepage with starch and XCD for Vis and WL will be utilized. Anticipated mud properties are as follows: MW 8.5, WL 15, PH 10, Vis 28, CL 70,000.

5100' to TD

3% KCL water with 20-50 PPM Nitrates, caustic for PH control and paper for seepage with starch and XCD for Vis and WL will be utilized. Anticipated mud properties are as follows: MW 8.8, WL <6, PH 10, Vis 30, CL 70,000.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A. A kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

8. Testing, Logging and Coring Program:

A two (2) man Mudlogging unit will be on location from the top of the Delaware formation to TD. Mudlogging unit will be employed from approximately 3110' (Top of Delaware) to 6860' TVD (Total Depth).

If indicated, DLL-MSFL, CNL-Density, Gamma Ray logs and Caliper logs will be run at TD. The Dual Laterolog will be run from +/-6400' TVD back to the intermediate casing and the Compensated Neutron/Density Log will be run from +/-6400' TVD back to surface. A Gamma Ray Log will be run in the horizontal section of the well. In some cases, Strata may elect to run rotary sidewall cores from selected intervals from approximately 3110' to 6860' dependent upon logging results.

9. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The anticipated bottomhole

HOLE PROGNOSIS

NASH UNIT #36

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pressure is 2600# PSI.

Loss of circulation is possible in the Delaware section of the hole, however, no major loss circulation zones have been reported in offsetting wells.

Strata has drilled and completed eighteen (19) wells in the immediate area. To date, Hydrogen Sulfide has not been encountered. However, if Hydrogen Sulfide is encountered, a Hydrogen Sulfide alarm on the drilling rig would be activated. All personnel have had Hydrogen Sulfide training and appropriate breathing apparatus is located on site. If necessary, the well can be shut in utilizing the blow out preventer and other equipment to prevent the migration of Hydrogen Sulfide to the surface.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is October 15, 2002. Once commenced, the drilling operation should be completed in approximately 25 days. If the well is productive, an additional 15 days will be required for completion and testing before a decision is made to install permanent facilities.

SURFACE USE PLAN
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
STRATA PRODUCTION COMPANY
NASH UNIT #33 WELL
10' FSL & 175' FWL
SECTION 12-23S-29E
EDDY COUNTY, NEW MEXICO

Submitted with Form 3160-3, Application For Permit to Drill covering the above captioned well. The purpose of the plan is to describe the location, the proposed construction activities, the operations, the surface disturbance involved, and the rehabilitation of the surface after completion of said well so that an appraisal can be made of the environment affected by this well.

1. Existing Roads:

- A. The Well Location and Acreage Dedication Plat for the proposed well has been staked by Dan R. Reddy, Engineer, Carlsbad, New Mexico and is attached.
- B. All roads to the location are shown in Exhibit "B". The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the on-site inspection.
- C. Directions to location: From Loving, New Mexico, the well is located approximately 9 miles to the east off State Highway 128.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as operations continue on the lease.

2. Proposed Access Road:

A new access road of approximately 250' will be required as shown on Exhibit "B" and is illustrated in yellow. The road will be constructed from the existing north south road as follows:

- A. The average grade will be less than 5%.
- B. No turnouts will be necessary.
- C. No culverts, cattleguards, gates, low-water crossings or fence cuts are necessary.
- D. Surfacing material will consist of native caliche. If required, road across pad will be surfaced with a minimum of 6" of caliche. Caliche will be obtained from the nearest BLM approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

3. Location of Existing Wells:

All existing wells within a one mile radius of proposed well are shown on Exhibit "C". A list of the wells is shown on the Attachment to Exhibit "C".

4. Location of Existing and/or Proposed Facilities:

In the event the proposed well proves to be productive, Strata Production Company will furnish maps or plats showing On Well pad facilities and Off Well pad facilities (if necessary) by Sundry Notice before beginning the construction of the facilities.

5. Location and Type of Water Supply:

The well will be drilled with a combination of brine and fresh water mud systems as outlined in the Hole Prognosis. The water will be purchased from commercial water stations in the area and trucked to the location by transport over the existing and proposed access roads as shown on Exhibit "B". If a commercial fresh water source is nearby, fasline may be laid along existing road ROWs and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and the proposed new access road (approximately 5000 cubic yards) will be obtained from a BLM approved caliche pit. All roads and pads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit approximately 150' x 150' x 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be plastic lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water. Drilling fluids will be allowed to evaporate in the reserve pits until dry.
- C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending upon rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass or steel) until transported via flowline or trucked to an approved disposal system or a separate disposal application will be submitted to BLM for approval. Produced oil will be collected in steel tanks until sold.
- D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations. Compliance with current laws and regulations pertaining to the disposal of human waste will be observed.

SURFACE USE PLAN

NASH UNIT #36

Page 4

- E. Garbage and trash produced during drilling or completion operations will be disposed in a separate trash trailer on location. All waste material will be contained to prevent scattering by the wind. All water and fluids will be disposed into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by the operation.
- F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until dried. When the reserve pit is dry enough to breakout and fill, and as weather permits, the unused portion of the wellsite will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will remain in use. In the event of a dry hole, only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facility will be built as a result of the operations of the proposed well. No permanent living facilities are planned, however, a temporary foreman/toolpusher's trailer will be on location during drilling operations.

9. Well Site Layout:

- A. The drill pad layout with elevations, as staked by Dan R. Reddy, Engineer, is shown on Exhibit "D". Dimensions of the pad, pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Since the pad is fairly level, no major cuts will be required.
- B. The planned orientation of the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around and parking areas, and access road are shown on Exhibit "D".

- C. The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).

10. Plan for Restoration of the Surface:

- A. Upon completion of the proposed operations, should the well be abandoned, the pit area, after allowed to dry, will be broken out and leveled. The original top soil will be returned to the entire location, and leveled and contoured to the original topography as nearly as possible.

All trash, garbage and pit lining will be removed in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time the rig is removed, the reserve pit will be fenced on the rig (fourth) side to prevent livestock or wildlife from being entrapped. The fencing will remain in place until the pit area is cleaned and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of the proposed operations, should the well be productive, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from an area of the original drillsite not needed for production operations or facilities will be removed and used for construction of thicker pads or firewalls for the tank battery installation. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drillsite will be used to recontour the pit area and unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The wellsite and lease are located entirely on Federal surface.

12. Other Information:

- A. The topography around the wellsite is rolling terrain with vegetation of sagebrush and native grass. The vegetation cover consists of prairie grasses and flowers. Wildlife in the area includes those typical of semi-arid desert land.
- B. The soils are clayey sand over caliche base.
- C. There is no live water in the immediate area.
- D. There are no residences and other structures in the area.
- E. The land in the area is used primarily for grazing purposes.
- F. An archaeological study has been conducted for the location and new access road. The report has been submitted separately.

13. Lessee's and Operator's Representative:

MARK MURPHY
P. O. BOX 1030
ROSWELL, NEW MEXICO 88202-1030
PHONE NUMBER: (505) 622-1127-OFFICE EXT. 12

14. Certification:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site which currently exists; that the statements made in the plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Strata Production Company and its contractors and sub-contractors in conformity with the plan, and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 USC 1001 for the filing of a false statement.

STRATA PRODUCTION COMPANY



Kelly Britt
PRODUCTION RECORDS MANAGER

DATE: August 21, 2002

EXHIBIT "A"

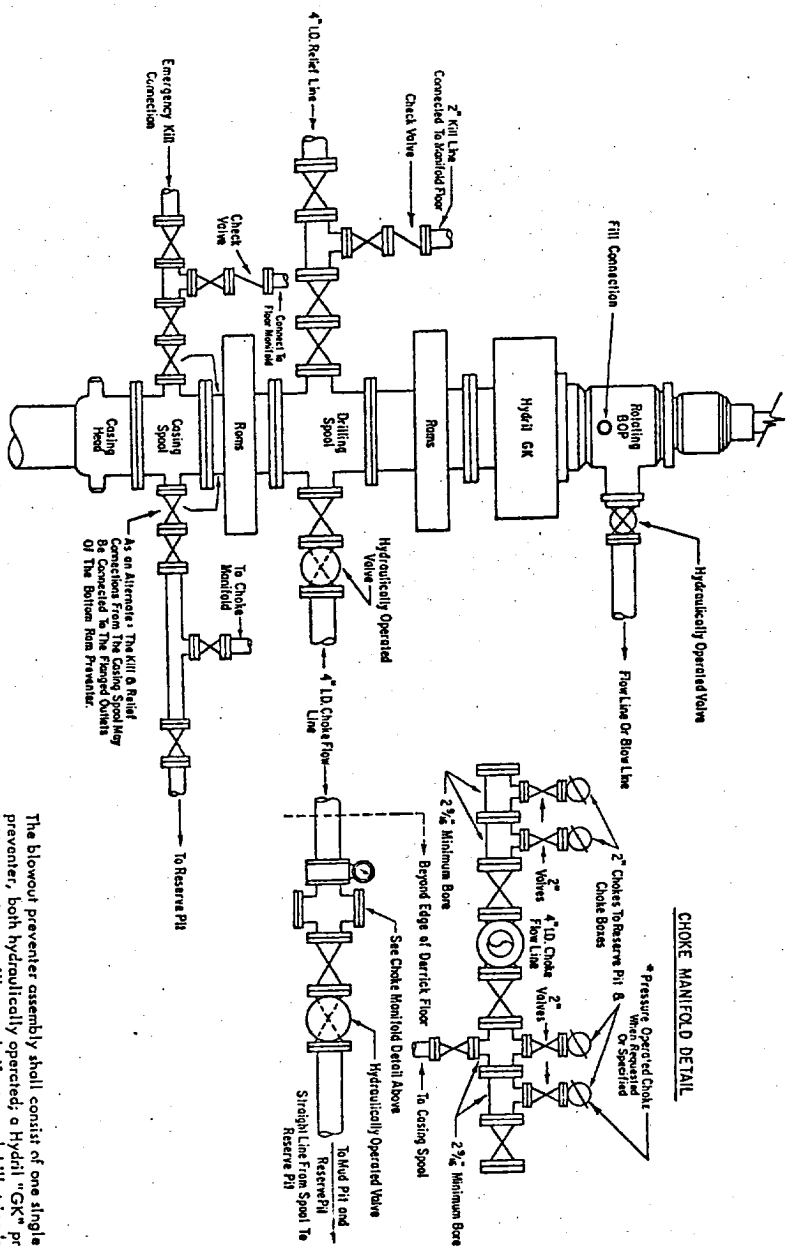
EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

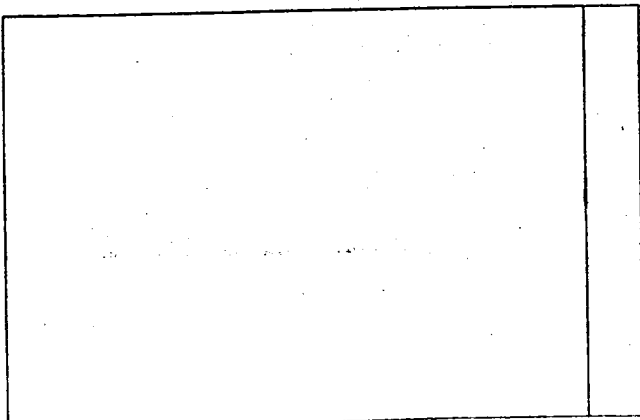
1. Bell nipple
2. Hydril bag type preventer
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 3" and one 2" (minimum) outlet.
5. 2" (minimum) flanged plug or gate valve.
6. 2"x 2"x 2" (minimum) flanged.
7. 3" gate valve.
8. Ram type pressure operated blowout preventer with pipe rams.
9. Flanged type casing head with one side outlet.
10. 2" threaded (or flanged) plug or gate valve. Flanged on 5000# WP, threaded on 3000# WP or less.
11. 3" flanged spacer spool.
12. 3"x 2"x 2"x 2" flanged cross.
13. 2" flanged plug or gate valve.
14. 2" flanged adjustable choke.
15. 2" threaded flange.
16. 2" XXH nipple.
17. 2" forged steel 90° Ell.
18. Cameron (or equal) threaded pressure gauge.
19. Threaded flange.
20. 2" flanged tee.
21. 2" flanged plug or gate valve.
22. 2 1/2" pipe, 300' to pit, anchored.
23. 2 1/2" SE valve.
24. 2 1/2" line to steel pit or separator.

NOTES:

- 1). Items 3, 4 and 8 may be replaced with double ram type preventer with side outlets between the rams.
- 2). The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.
- 3). Kill line is for emergency use only. This connection shall not be used for filling.
- 4). Replacement pipe rams and blind rams shall be on location at all times.
- 5). Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
- 6). Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.



CHOKES MANIFOLD DETAIL



3000 # PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected to the nitrogen precharge pressure to its rated pressure within _____ minutes. Also, the pumps are to be connected to the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume of at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to rom prevention. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves connected to the drilling spool and all rom type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.

31389

31444

30833

EXHIBIT "B"

DH

#33

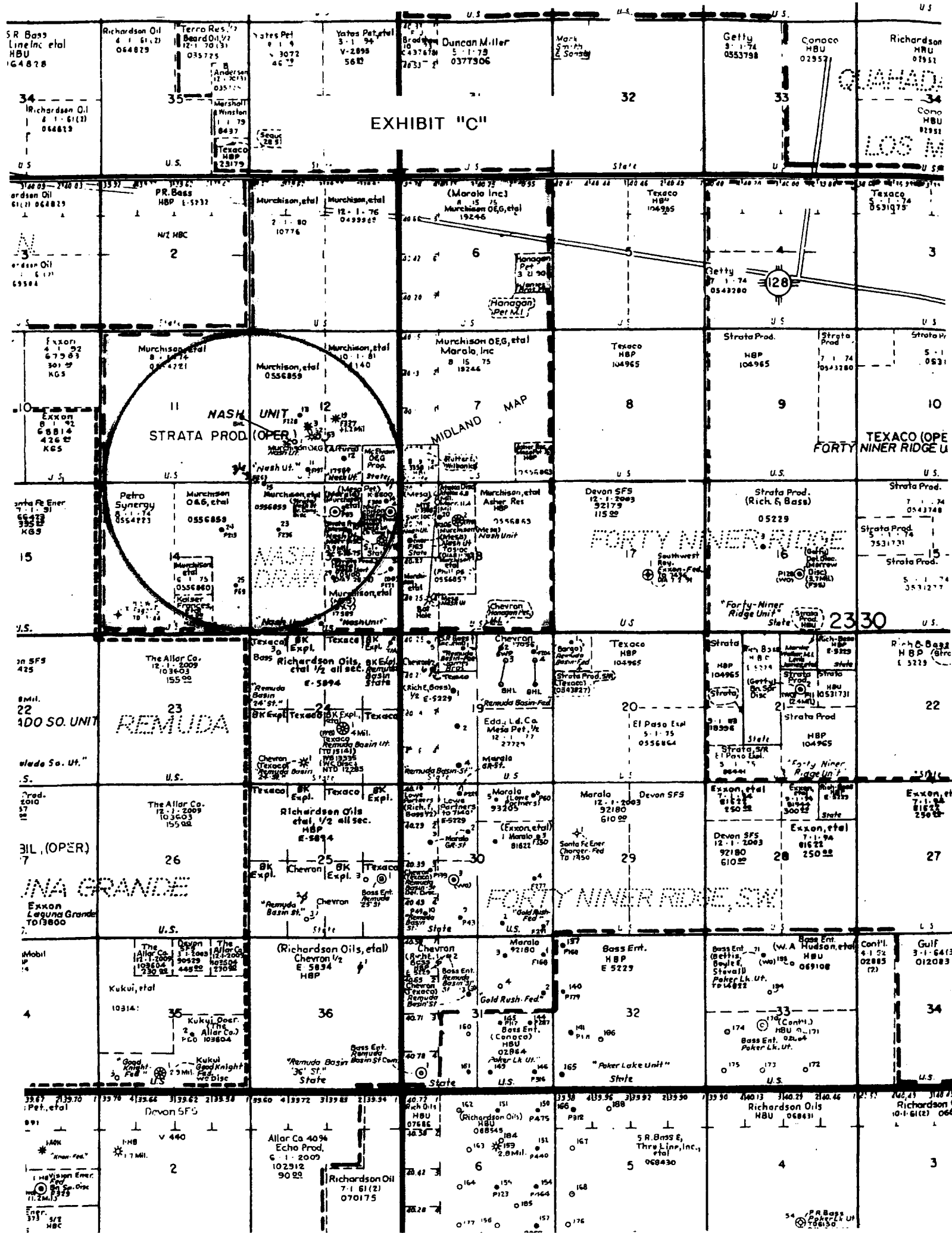
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REMUDA
BASIN

#23

29917

PIPELINE

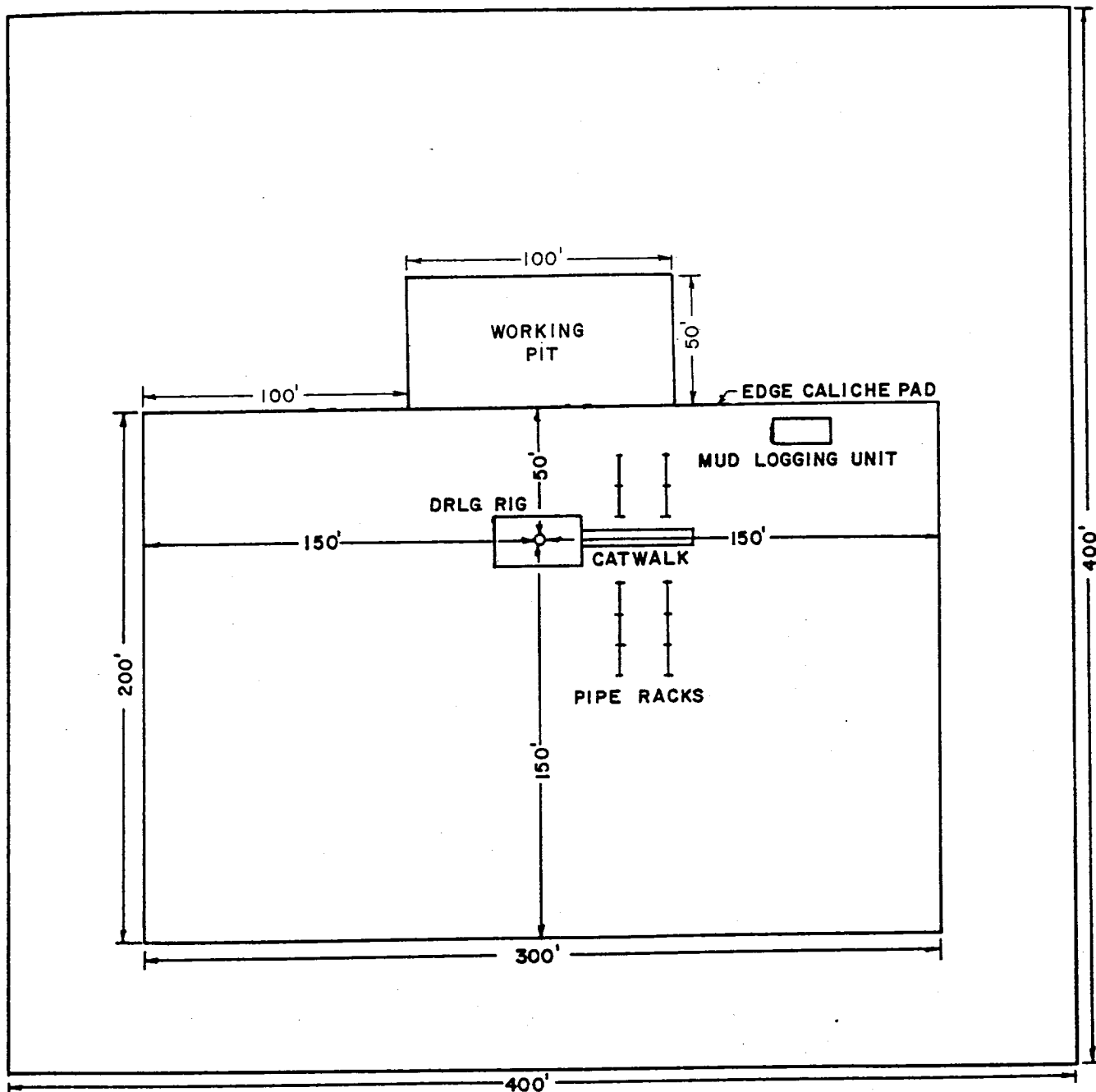


Attachment to Exhibit "C"

STATUS OF WELLS WITHIN ONE MILE RADIUS

Nash Unit #33
Section 12-23S-29E
Eddy County, New Mexico
AUGUST 2002

<u>Section 12-23S-29E</u>	<u>Well #</u>	<u>Footage</u>	<u>Status/Formation</u>
Murchison Oil & Gas	Nash Unit #3	1980'FSL&1980'FWL	Atoka
Strata Production Co.	Nash Unit #11	498'FSL&2000'FWL	Delaware
Strata Production Co.	Nash Unit #12	918'FSL&2153'FEL	Delaware
Strata Production Co.	Nash Unit #13	2315'FSL&1746'FWL	Delaware
Strata Production Co.	Nash Unit #16	330'FSL& 990'FEL	To be drilled
Strata Production Co.	Nash Unit #19	2202'FSL&2201'FEL	Delaware
Strata Production Co.	Nash Unit #36	1460'FSL&1585'FWL	Delaware
Murchison Oil & Gas	Nash Unit #52	1628'FSL&2150'FWL	Atoka
<u>Section 13-23S-29E</u>	<u>Well #</u>	<u>Footage</u>	<u>Status/Formation</u>
Strata Production Co.	Nash Unit #1	1980'FNL& 660'FEL	Delaware
Strata Production Co.	Nash Unit #4	990'FNL& 330'FEL	SWD
Strata Production Co.	Nash Unit #5	2310'FSL& 330'FEL	Delaware
Murchison Oil & Gas	Nash Unit #8	990'FSL& 990'FEL	Abandon loc
Strata Production Co.	Nash Unit #9	860'FNL&2210'FEL	Delaware
Strata Production Co.	Nash Unit #10	1750'FNL&1800'FEL	Delaware
Strata Production Co.	Nash Unit #14	660'FNL& 500'FEL	Delaware
Strata Production Co.	Nash Unit #15	10'FNL& 475'FWL	Delaware
Strata Production Co.	Nash Unit #21	1650'FNL&1650'FEL	To be drilled
Strata Production Co.	Nash Unit #23	1605'FNL& 660'FWL	Delaware
Strata Production Co.	Nash Unit #29	1980'FSL&2310'FEL	Delaware
Strata Production Co.	Nash Unit #30	940'FSL& 760'FEL	To be drilled
Strata Production Co.	Nash Unit #38	330'FSL&2450'FWL	Delaware
Strata Production Co.	Nash Unit #51	2410'FSL& 510'FWL	Location
<u>Section 14-23S-29E</u>	<u>Well #</u>	<u>Footage</u>	<u>Status/Formation</u>
Strata Production Co.	Nash Unit #24	1650'FNL & 990'FEL	Delaware
Strata Production Co.	Nash Unit #25	1650'FSL & 500'FEL	Delaware
Strata Production Co.	Nash Unit #31	2425'FNL &1650'FEL	Abandoned loc



STRATA PRODUCTION COMPANY

DRILLING RIG LAYOUT PLAN

NASH UNIT #33
 10' FSL & 175' FWL
 Section 12-23S-29E
 Eddy County, New Mexico

EXHIBIT "D"

NASH DRAW #33
S.L. 10' FNL & 75' FWL SECTION 13
3.H.L. 2250' FWL & 2650' FSL SECTION 11
T23S-R29E
EDDY COUNTY, N.M.

EXHIBIT "E"

VERTICAL PLAN VIEW

8 5/8" CASING @ 3100'

TDP OF F-2 @ 5778'

'L' 6800'

BHL

4152.3'

14.3 DEG / 100'
R=400'

5.72 DEG. / 100'

R=1000'

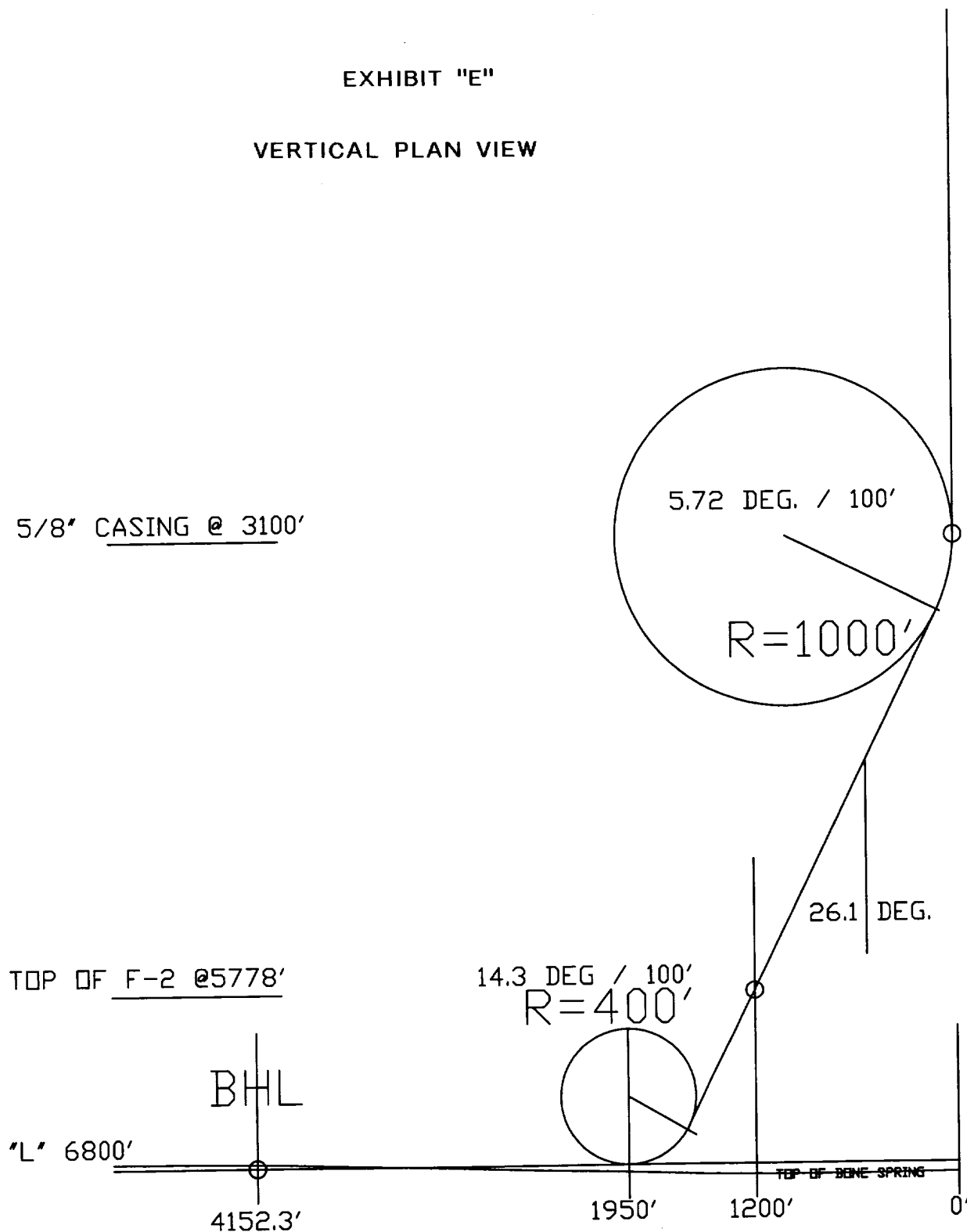
26.1 DEG.

TDP OF BENE SPRING

1950'

1200'

0'



HORIZONTAL PLAN VIEW

11

2250.0000

BHL

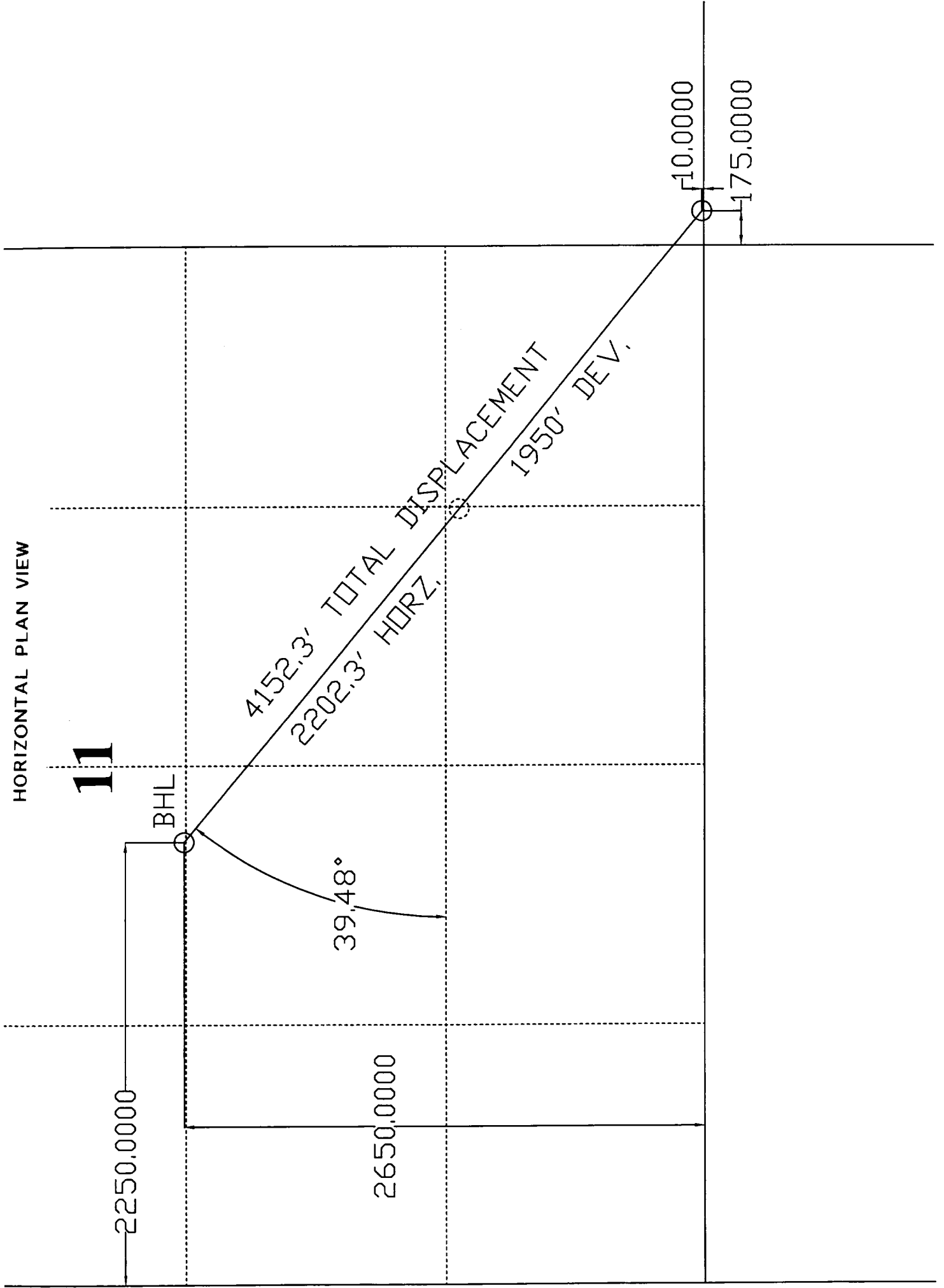
39.48°

2650.0000

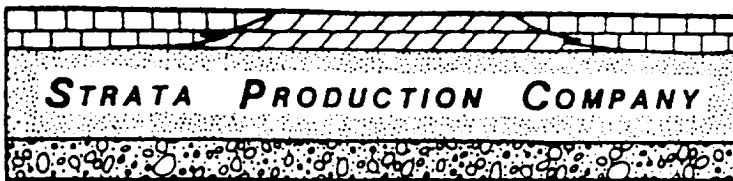
4152.3' TOTAL DISPLACEMENT
2202.3' HORZ.
1950' DEV.

10.0000

175.0000



POST OFFICE DRAWER 1030
ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700
ROSWELL, NEW MEXICO 88203

August 22, 2002

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
#7002 0460 0002 5447 9923

IMC Kalium Carlsbad Potash Company
ATTN: Mr. Peter N. Livingstone,
Chief Mine Engineer
P. O. Box 71
Carlsbad, New Mexico 88221-0071

Re: Application to Drill in Potash Area
Nash Unit #33
Section 12-23S-29E
Eddy County, New Mexico

Dear Mr. Livingstone:

In accordance with the State of New Mexico Oil Conservation Division Rule R-111-PC (2)(3), enclosed herewith please find the following for your review and further action:

1. Form 3160-3 Application For Permit To Drill.
2. Form C-102 Well Location and Acreage Dedication Plat.

State of New Mexico Public Land records reflect IMC Kalium Carlsbad Potash Company as a potash lessee in the area of the captioned lands. Strata Production Company, a New Mexico corporation, hereby advises you of its intention to drill a well to 7200' at a location 10' FSL & 175' FWL of Section 12, Township 23 South, Range 29 East, Eddy County, New Mexico.

If you are in agreement with Strata that drilling at the proposed location will not interfere with potash operations, please sign and return one copy of this letter within 10 days of receipt of said letter.

Should you have any questions or require additional information, please advise.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kelly M. Britt".

Kelly M. Britt
Production Records

AGREED TO AND ACCEPTED THIS ____ DAY OF AUGUST, 2002.

BY: _____

TITLE: _____

cc: Bureau of Land Management, Carlsbad, NM