

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N. M. Oil Co. Form approved.  
(Other Instru on  
6/1/85)

Budget Bureau No. 1004-0136  
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Journey Operating, L.L.C.

3. ADDRESS OF OPERATOR

1201 Louisanna, Suite 1040, Houston, TX 77002

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

At surface

660' FSL, 1980' FEL

At proposed prod. zone

Same

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

19 Miles East-Southeast of Loving

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

660'

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

1320'

16. NO. OF ACRES IN LEASE

1682.1

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

19. PROPOSED DEPTH

8700'

20. ROTARY OR CABLE TOOLS

Rotary

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

3450' GR

22. APPROX. DATE WORK WILL START\*

June 2001

R-111-P Potash

Secretary's Potash

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5#	650' 750'	540 SKS (907cu. ft.)
11"	8-5/8"	32.0#	4400'	1020 SKS (2167 cu. ft.)
7-7/8"	5-1/2"	15.5 & 17#	8700'	750 SKS (1321 cu.ft.) Circ. to int.



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.

SIGNED

Charles W. Knight

TITLE

Engineer (915) 683-8000

DATE 5/4/01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

(ORIG. SGN.) M. J. CHAVEZ

STATE DIRECTOR

JUN 29 2001

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

DATE

APPROVAL FOR 1 YEAR

\*See Instructions On Reverse Side

RECEIVED

2001 MAY -9 AM 10:38

BUREAU OF LAND MGMT  
FOREST SERVICE

DISTRICT I  
P.O. Box 1888, Hobbs, NM 88241-1888

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 53815	Pool Name Sand Dunes West (Delaware)
Property Code	Property Name SUNDANCE A Federal	Well Number 16
OGRID No. 190667	Operator Name JOURNEY OPERATING, L.L.C.	Elevation 3450'

Surface Location

UL or lot No. 0	Section 5	Township 24-S	Range 31-E	Lot Idn	Feet from the 660	North/South line SOUTH	Feet from the 1980	East/West line EAST	County EDDY
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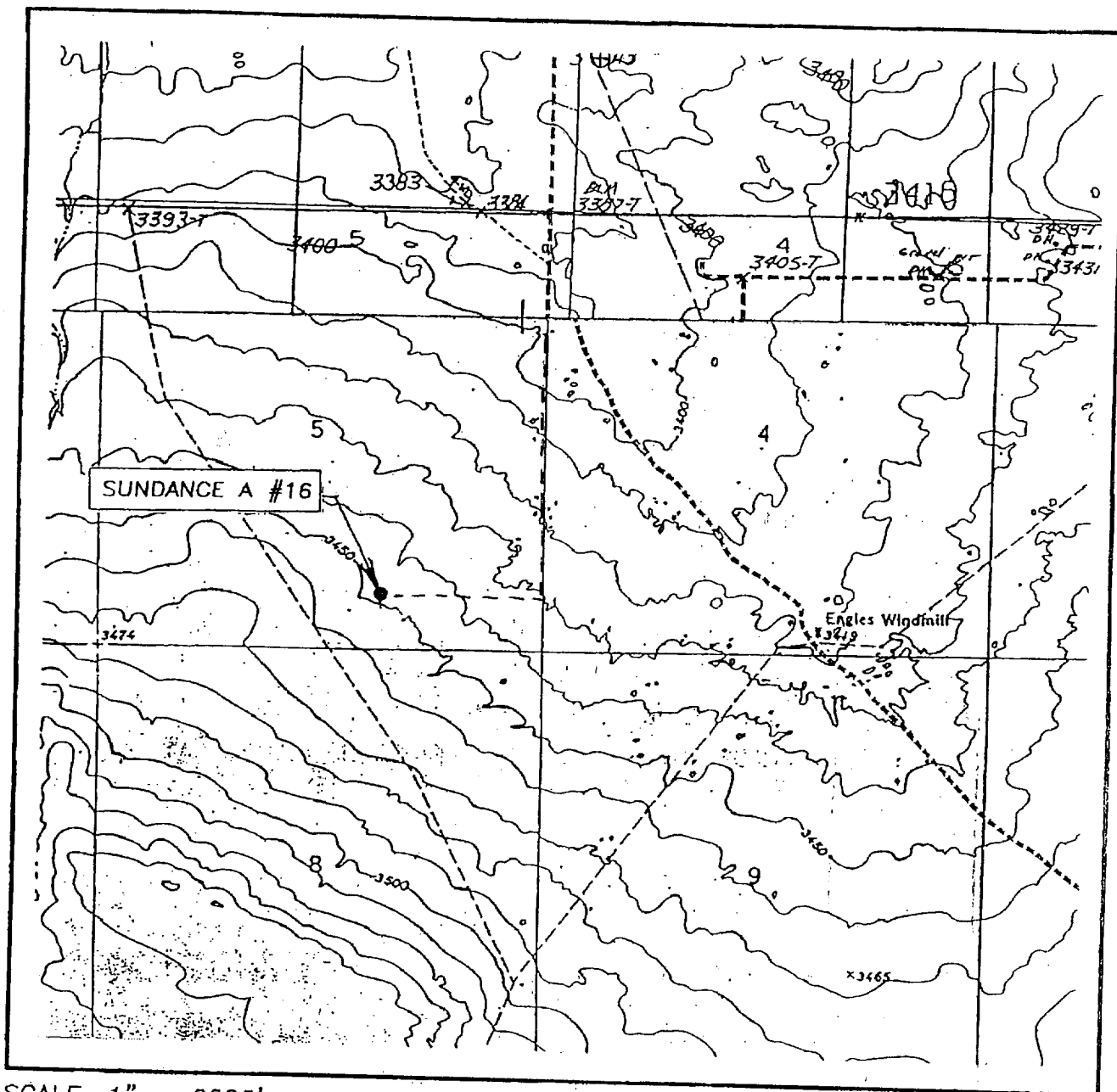
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	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

LOT 4 40.25 AC	LOT 3 40.26 AC	LOT 2 40.28 AC	LOT 1 40.29 AC
<div>200 JUN 25 P 2:05</div>			
<div>3453.9' 3447.9' 3452.4' 3447.4' 660' 1980'</div>			
<div>OPERATOR CERTIFICATION</div> <div>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</div> <div>Charles W. Knight, Jr.</div> <div>Signature</div> <div>Charles W. Knight, Jr.</div> <div>Printed Name</div> <div>Engineer</div> <div>Title</div> <div>June 22, 2001</div> <div>Date</div> <div>SURVEYOR CERTIFICATION</div> <div>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.</div> <div>FEBRUARY 27, 2001</div> <div>Date Surveyed</div> <div>AWB</div> <div>Signature &amp; Seal of Professional Surveyor</div> <div>GARY J. KIDSON 3/8/01</div> <div>01-14-0257</div> <div>Certificate No. RONALD J. KIDSON 3239 12641</div>			

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'  
BIG SINKS, N.M.

SEC. 5 TWP. 24-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660'FSL & 1980'FEL

ELEVATION 3450'

OPERATOR JOURNEY OPERATING L.L.C.

LEASE SUNDANCE A FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
BIG SINKS, N.M.

JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117

# DRILLING PLAN

*Attachment to BLM Form 3160-3*

Journey Operating, L.L.C.

Well: Sundance A Federal #16

660' FSL, 1980' FEL

Section 5, T24S, R31E

Eddy County, New Mexico

## 1. Surface Geological Formation

Quaternary Formation

## 2. Estimated Tops of Geological Markers

<u>Formation</u>	<u>TVD</u>
Rustler	665'
Castile	1000'
Lamar Shale	4230'
Bell Canyon	4265'
Cherry Canyon	5340'
Brushy Canyon	6690'
Bone Spring	8115'

## 3. Estimated Tops of Possible Water, Oil, Gas or Minerals:

Sands above 600'	Water
Cherry & Brushy Canyon	Oil or Gas

## 4. Pressure Control Equipment

<u>Interval, TVD</u>	<u>Pressure Control Equipment</u>
0' - 650'	No pressure control required
650' - TD	11", 3M psi double ram preventer with 3M psi annual preventer

Exhibits 1, 2 and 3 show the BOP stack arrangement, the choke manifold arrangements and the BOP specifications, respectively. The BOPE will be hydraulically tested per BLM requirements outlined by Onshore Oil and Gas Order No. 2. Pipe rams and blind rams will

be functioned on each trip out of the hole. All BOPE checks and tests will be witnessed by Journey's representative and will be noted on the IADC daily drilling report. Accessories to BOPE will include an upper kelly cock, lower kelly cock, and floor safety valve; all with pressure rating equivalent to the BOP stack.

## 5. Proposed Casing and Cementing Program

	Hole Size	Interval M.D.	Casing Size	Weight & Grade
Surface	17-1/2"	0-650'	13-3/8"	54.5# J-55 STC
Intermediate	11"	0-4400'	8-5/8"	32.0# J-55 LTC
Production	7-7/8"	0-5000'	5-1/2"	15.5# J-55 LTC
		5000-8700'	5-1/2"	17.0# J-55 LTC

Cement Program: (Actual volumes will be based on caliper log when available)

Surface - Cement to surface with total of +/- 907 cu ft as follows:

Lead Slurry - 330 sks 35:65 Poz:C + 6% Bentonite + 2% CaCl<sub>2</sub>  
+ 1/4 pps Cello-flake

Tail Slurry - 210 sks 25:75 Poz:C + 2% CaCl<sub>2</sub> + 1/4 pps Cello-flake

Intermediate - Cement to surface with a total of +/- 2167 cu ft as follows:

Lead Slurry - 800 sks 50:50 Poz:C + 10% Bentonite + 0.2% Antifoamer  
+ 0.2% Flac + 1/4 pps Cello-flake

Tail Slurry - 220 sks 25:75 Poz:C + 1/4 pps Cello-flake

Production - Cement to Intermediate Csg with a total of +/-1321 cu ft as follows:

Lead Slurry - 340 sks 50:50 Poz:H + 10% Bentonite + 0.2% Antifoamer  
+ 0.2% Flac + 1/4 pps Cello-flake

Tail Slurry - 410 sks 50:50 Poz:H + 2% Bentonite + 0.2% Antifoamer  
+ 0.2% Flac + 5% Salt + 1/4 pps Cello-flake

## 6. Mud Program

Depth	Mud Type	Weight ppg	Funnel Viscosity	Water Loss
0'- 650'	Spud Mud	8.4-8.9	29-34	NC
650'- 4600'	Brine	10.0-10.2	28-30	NC
4600'- 8000'	FW	8.4-8.8	28-30	NC
8000 - 8700'	FW LSND	8.6-9.0	32-34	≤15 cc

**7. Auxiliary Equipment**

Upper Kelly Cock, Lower Kelly Cock, and Full Opening Stabbing Valve

**8. Testing, Coring, and Logging Program**

- A. Drill Stem Tests - None planned.
- B. Coring - None planned.
- C. Logging - Mud logging planned from 4000' to TD
- D. Electric Logs
  - Open Hole: DLL/MLL, CNL/LDT, GR: Shoe of 8-5/8" csg to TD
  - Cased Hole: GR/CNL Surf. to shoe of 8-5/8" csg
  - GR/CCL TD to top cement in prod. csg.

**9. Anticipated Abnormal Temperature, Pressure, or Hazards**

Possible water flow from +/- 3500' to 4200'. Seepage is expected starting in the Cherry Canyon formation and continuing to TD (5340'-8700').

**10. Anticipated Starting Date and Duration of Operations**

Pending favorable weather and permit approval, construction work on this location is planned to begin in June 2001. Construction work will require 4 days, move-in and rig up rotary tools, 1 day, drill and complete, 21 days. It is planned to spud the well in June 2001.

# **SURFACE USE PLAN**

*Attachment to BLM Form 3160-3*

Journey Operating, L.L.C.

Well: Sundance A Federal #16

660' FSL, 1980' FEL

Section 5, T24S, R31E

Eddy County, New Mexico

## **1. Directions to Location/Existing Roads**

From Carlsbad, New Mexico go southeast on Highway 285 approximately 9 miles. Turn left and go east on Highway 31 for 7.5 miles. Turn right and go 13.5 miles on Highway 128 east then southeast. Turn right onto lease road and go south 3.25 miles to 3<sup>rd</sup> road past Sundance lease tank battery. Turn right and go approximately 2000' west to Sundance "A" Federal #16 well.

- A. The proposed development wellsite is staked as shown on the certified location plat attached.
- B. Most of the existing roads will not require any improvement or repair. Any existing sections of road that needs improvement or repair will be fixed to a condition equal to that of the good sections of the existing road. All roads will be maintained in a condition equal to that which existed prior to the start of the construction.

## **2. Planned Access Roads**

- A. No additional roads will be required.
- B. Roads will have a 12' wide travel lane and are surfaced with 6" compacted caliche.
- C. Turnouts: None
- D. Culverts: None
- E. Cuts and fills: No major road cuts or fills will be necessary.



### **3. Location of Existing Wells**

The existing wells within a one mile radius of this location are shown on the attached land plat.

### **4. Location of Existing or Proposed Facilities**

- A. Existing Facilities – consist of heater treaters and collection tanks for oil and water at a central tank battery for the lease.
- B. Proposed Facilities – a completed well will have a pump jack and flowline laid alongside existing roads to the existing battery.

### **5. Location and Type of Water Supply**

Fresh and brine water used in drilling and completion operations will be purchased from independent trucking companies located in Jal or Hobbs, New Mexico. The water will be hauled over existing and new roads to the location.

### **6. Source of Construction Materials**

Any caliche needed to upgrade the existing road and well pad will be purchased from the nearest available commercial source.

### **7. Methods of Handling Waste Disposal**

- A. Drill cuttings will handled in the reserve pit and buried during reclamation operations.
- B. Trash, waste paper, garbage and junk will be contained in a fenced trash trailer to prevent scattering by the wind and hauled to a municipal sanitary landfill. All sacked drilling mud will be picked up by the supplier. The drilling contractor will haul away any chemicals that they use while drilling.
- C. Toilet facilities will be provided for human waste. Sewage disposal facilities will be in accordance with State and Local Regulations.

- D. Drilling fluids will be handled as follows: The free water will be either hauled to the reserve pit of the next drilling well for re-use or hauled to a permitted SWD. If any mud is hauled away it will be disposed of at an approved mud disposal site. Remaining drilling fluids will be allowed to evaporate in the reserve pit until dry enough for reclamation.
- E. Any fluids produced during swab testing the well while the pulling unit is on location will be collected in a test tank. Produced water will be hauled to a permitted SWD. Oil produced will remain in the test tank until sold and hauled from the site.

## **8. Auxiliary Facilities**

No new facilities will be built during drilling of this well. A trailer will be used as an office and temporary living quarters for wellsite supervision.

## **9. Wellsite Layout**

- A. See attached exhibit to reference the proposed wellsite layout and dimensions. Major rig components and reserve pits are shown.
- B. No significant cuts or fills will be required.
- C. The reserve pits will be plastic lined with minimum 6 mil double x-laminated plastic. The liner will overlap the pit dikes and be anchored down. The reserve pit will be fenced on three sides during drilling operations. After drilling operations have ceased the fourth side of the pit will be fenced.

## **10. Plans for Reclamation of the Surface**

- A. In a timely manner, after finishing the drilling and/or completion operations all equipment and other material not needed for production operations will be removed. The location will be cleared of all trash and debris then any ruts, etc. will be filled. The cellar will be filled around the wellhead.
- B. Any pits containing fluids will be fenced until they are backfilled. The NMOCD pit netting rules will be followed. The reserve pits will be reclaimed by deep burying the drill cuttings. The pit area will be leveled and contoured to conform to the surrounding area. A stockpile of topsoil

from the location construction will be evenly distributed over the disturbed area. Re-vegetation procedures will comply with BLM standards.

- C. Upon abandonment of the well, surface restoration will be in accordance with the surface owner requirements and will be accomplished as expediently as possible.

#### **11. Surface Ownership**

The surface for the wellsite location is on BLM surface.

#### **12. Additional Information**

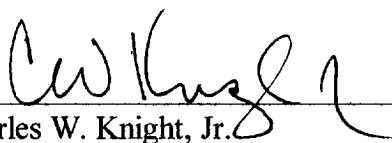
- A. Topography: Relatively flat grassland.
- B. Vegetation includes mesquite, catchlaw, creosote, broom snakeweed, various cacti, shin oak, sand sage, narrowleaf yucca and mixed grasses.
- C. The soil is a sandy loam type.
- D. Primary use of the land is livestock grazing and accessing producing wells.
- E. There are no nearby dwellings.
- F. An archaeological block survey has been completed; a copy of which will be sent to your office.
- G. The selected dirt contractor will be furnished with an approved copy of the Surface Use Plan and any additional stipulations prior to beginning any work.

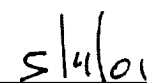
#### **13. Operator's Representatives**

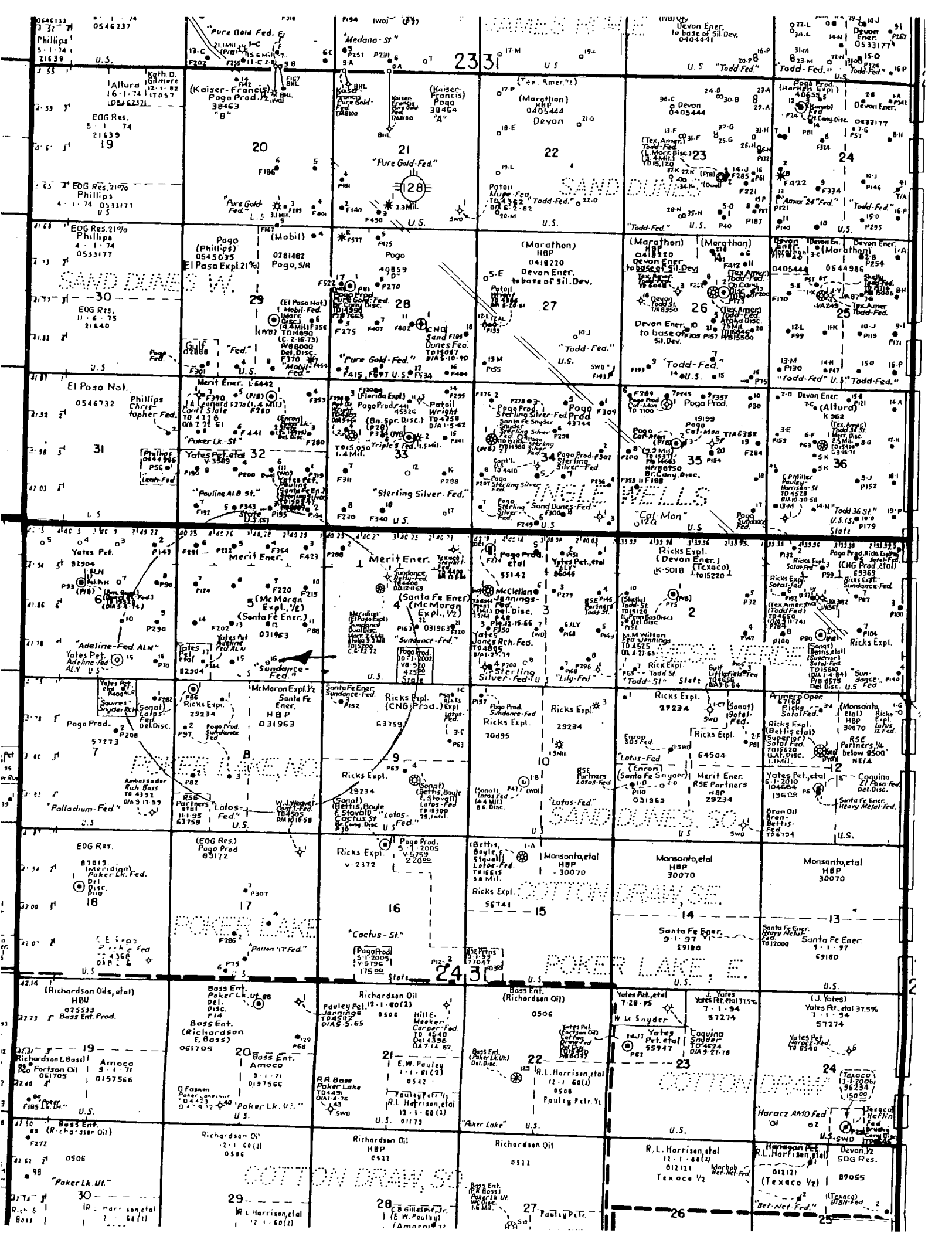
Brian Baer, Jerry Garrett  
Journey Operating, L.L.C.  
1201 Louisiana Street, Suite 1040  
Houston, Texas 77002  
(713) 655-0595

### **Certification**

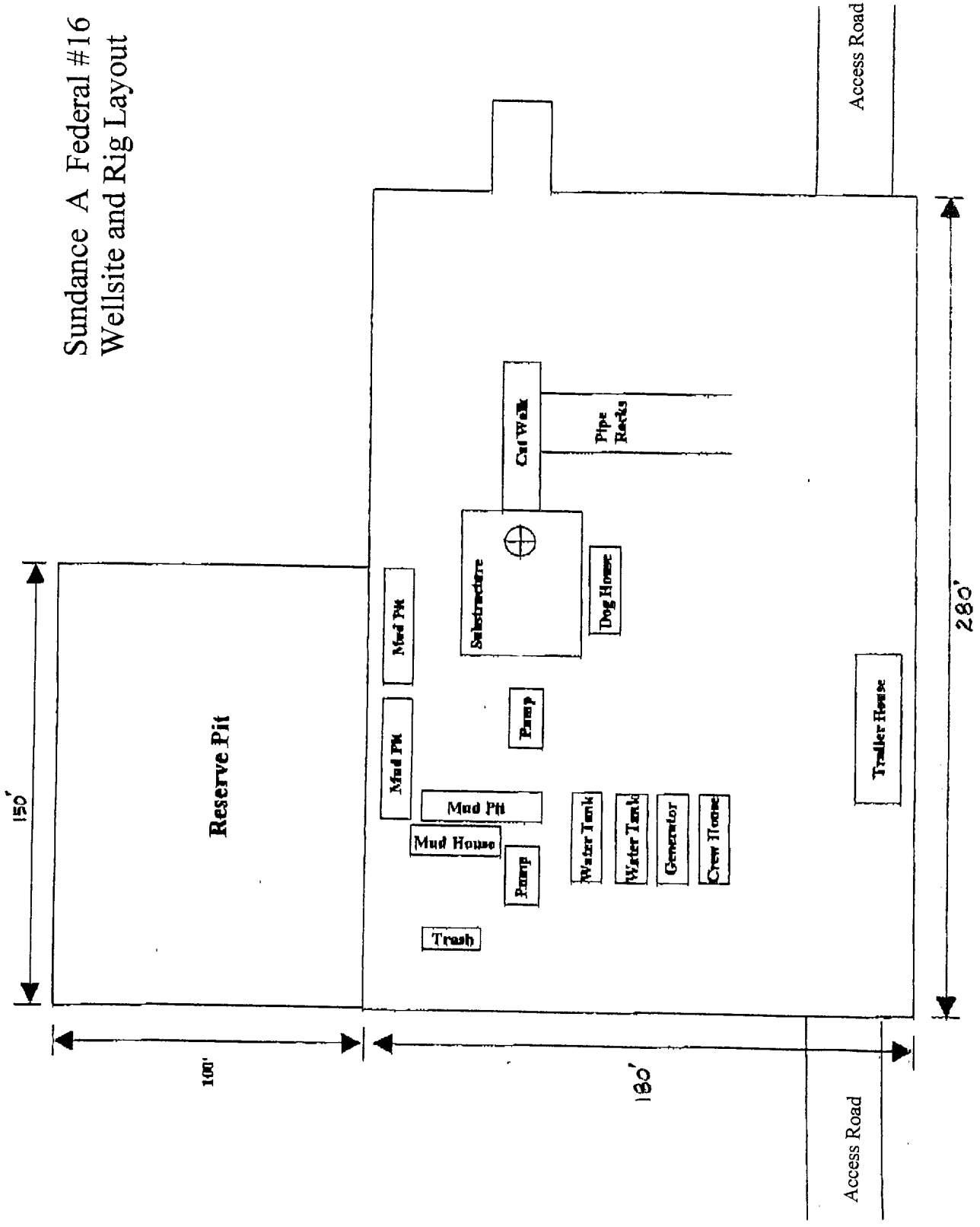
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Journey Operating, L.L.C. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
Charles W. Knight, Jr.

  
\_\_\_\_\_  
Date



# Sundance A Federal #16 Wellsite and Rig Layout



## **BLOWOUT PREVENTION EQUIPMENT SPECIFICATIONS**

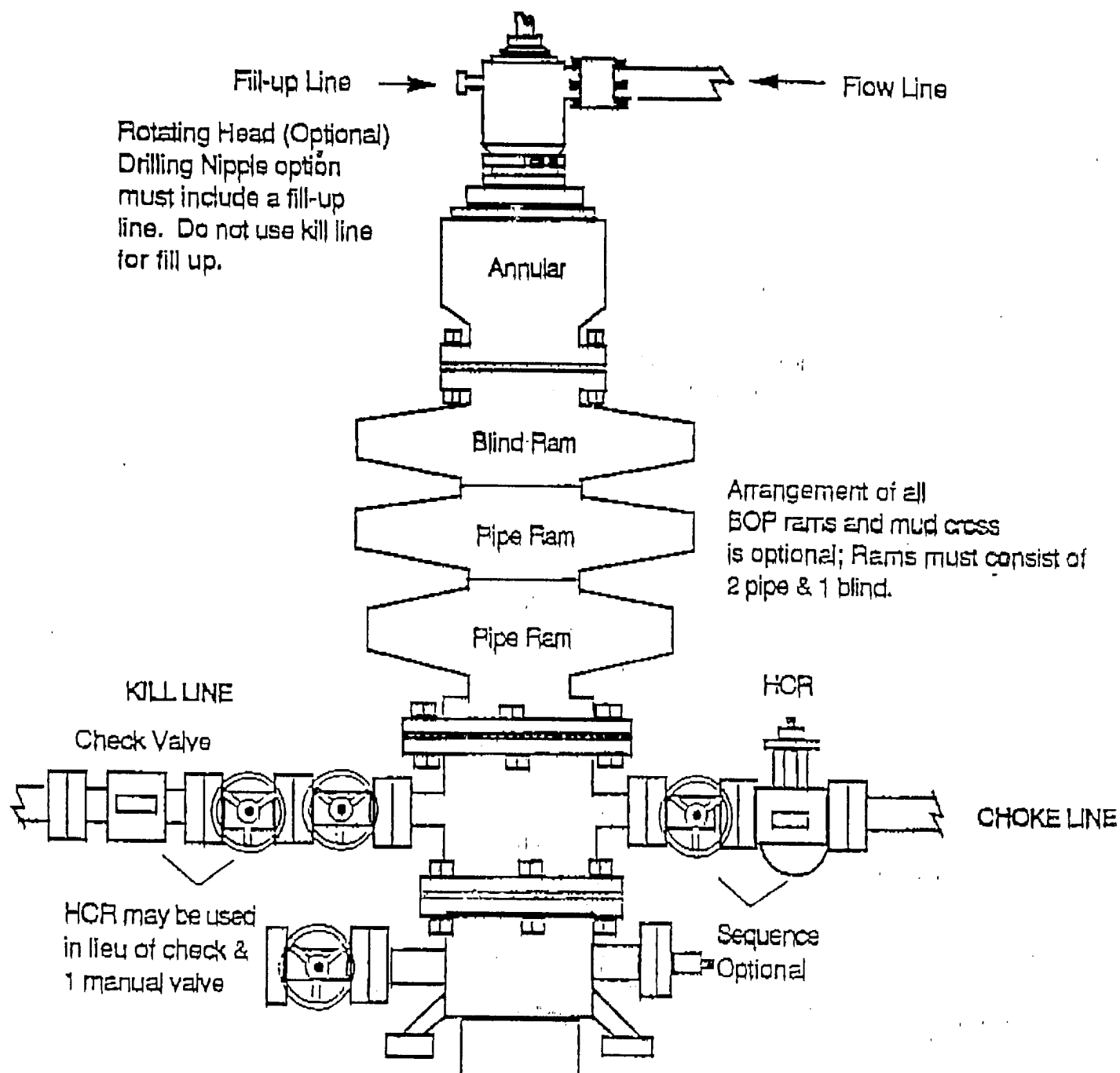
1. All BOP equipment shall be fluid and/or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as the casing size being drilled.
4. The nipple above the BOP shall be at least the same size as the last casing set.
5. The upper kelly cock with handle and lower kelly cock shall be rated at the BOP working pressure.
6. A floor safety valve (full opening) or drill string BOP with appropriate pressure ratings shall be available on the rig floor with connections or subs to fit any tool joint in the string.
7. The minimum size choke line shall be 3 inches nominal diameter, with a minimum size for vent lines downstream of chokes of 2 inches nominal, and vent lines which by-pass shall be a minimum of 3 inches nominal and as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Minimum size for kill line is 2 inches nominal.
10. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.

# BOP

## DRILLING OPERATIONS

CLASS -1: NORMAL PRESSURE < 10PPG

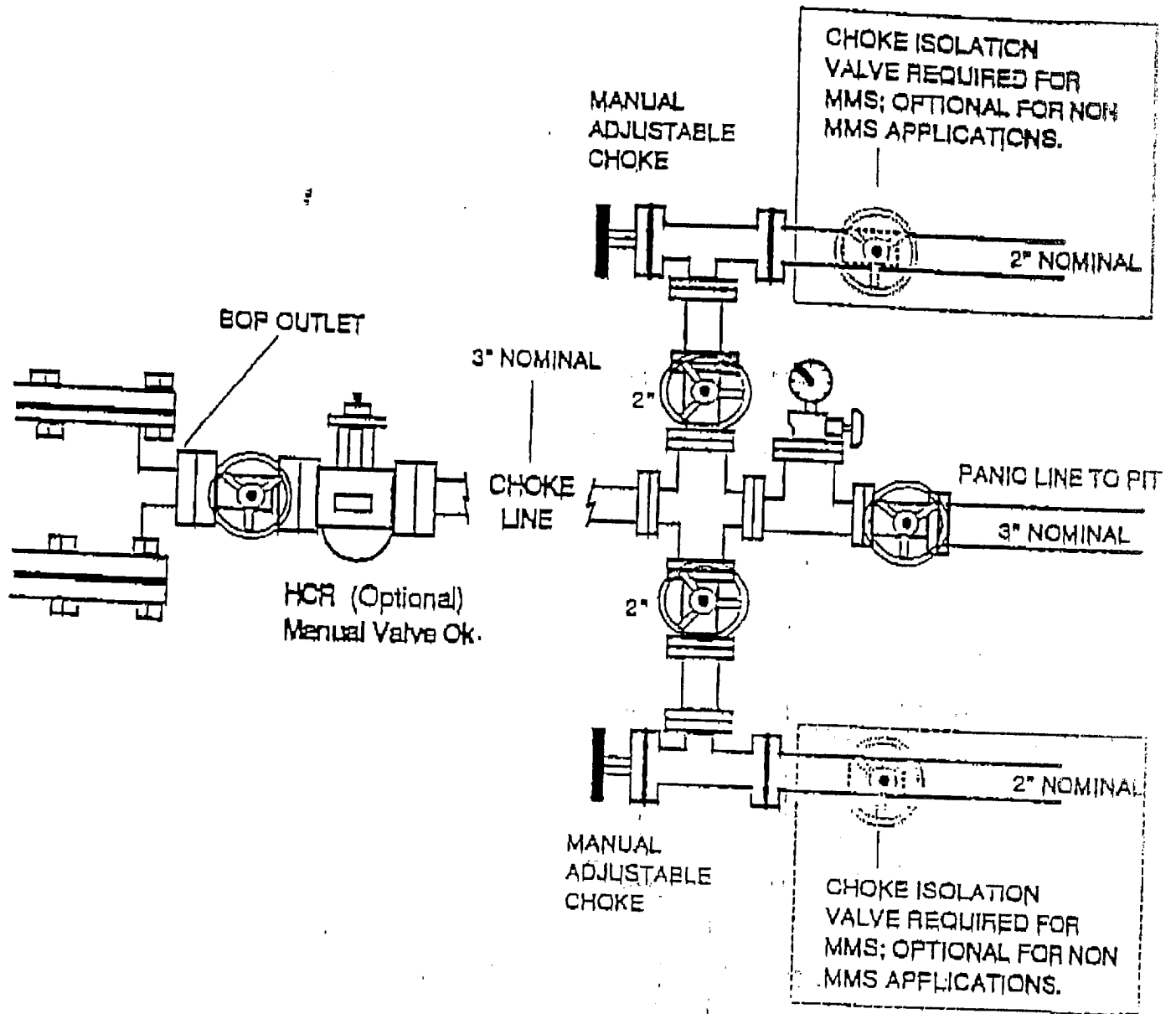
OPTION - 2: MMS STANDARD; SINGLE SIZE DRILL STRING





DRILLING OPERATIONS  
CHOKE MANIFOLD  
2M AND 3M SERVICE

# CHOKE MANIFOLD



UNITED STATES DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
Roswell Field Office  
2909 West Second Street  
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator name: Journey Operating, L.L.C.  
Street or Box: 1201 Louisiana Street, Suite 1040  
City, State: Houston, TX  
Zip Code: 77002

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

Lease No.: NM104730 Sundance A No. 16

Legal Description of Land: Sec 5-T24S-R31E; 660' FSL and 1980' FEL

Formation(s) (if applicable): Delaware and Brushy Canyon

Bond Coverage (State if individually bonded or another's bond): Nationwide

BLM Bond File No.: RLB0002487  
WY3354

Authorized Signature: 

Title: Regulatory Analyst

Date: May 14, 2001