

CISP

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒ DEEPEN ☐

b. TYPE OF WELL

Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone ☒

2. Name of Operator

Bass Enterprises Production Company

3. Address and Telephone No.

P.O. Box 2760, Midland, TX 79702 (915) 683-2277

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

At Surface

1980' FSL & 2130' FWL, Section 6, T23S, R31E

At proposed prod. zone

Unit K

14. Distance in miles and direction from nearest town or Post Office*

16 miles east from Loving, New Mexico

15. Distance from proposed*

Location to nearest

Property or lease line, ft.

660'

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

16. No. of acres in Lease

280

17. No. of Acres assigned to this Well

40

18. Distance from proposed location*

to nearest well, drilling, completed, or applied for, on this Lease, ft.

840'

19. Proposed Depth

11,350'

20. Rotary or Cable Tools

Rotary

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

3307' GL

22. Approx. date work will start*

ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	11 3/4" WC-40	42#	600'	365 sx Circ to surface
11"	8 5/8" WC-50	28# & 32#	3950'	900 sx Circ to surface
7 7/8"	5 1/2" P-110	20#	11,350'	1900 sx Circ to surface

R-111-P POTASH

SECRETARY'S POTASH

NOTIFY OCD SPUD & TIME TO WITNESS
WATER PROTECTION STRING

Surface casing to be set +/-100' above the Salt.

Intermediate casing to be set in the top of the Lamar Lime.

Production casing cement to be circulated to surface.

Drilling procedure, BOPE diagram, anticipated formation tops, and surface use plans attached.

This is a re-permit, the original APD was submitted as a Delaware completion located at 1980' FSL

AF
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 William R. Dannels W. R. Dannels

Title Division Drilling Supt.

Date Nov. 2, 2000

(This space for Federal or State office use)

Permit No. _____

Approval Date _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

Approved by R. A. Whiteley Title Acting STATE DIRECTOR Date April 23, 2001

*See Instruction on Reverse Side

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

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 86210

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87506

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
		LOS MEDANOS SOUTH (WOLFCAMP) FIELD
Property Code	Property Name	Well Number
	JAMES RANCH UNIT	75
OCRD No.	Operator Name	Elevation
001801	BASS ENTERPRISES PRODUCTION COMPANY	3307'

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	6	23 S	31 E		1980	SOUTH	2130	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	Joint or Infill	Consolidation Code	Order No.						
40	N								

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 - 40.45 AC.	LOT 3 - 39.90 AC.	LOT 2 - 39.94 AC.	LOT 1 - 39.95 AC.
LOT 5 - 40.79 AC.			
LOT 6 - 40.96 AC.			
LOT 7 - 41.15 AC.			

OPERATOR CERTIFICATION

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

William R. Dannels
Signature

W. R. Dannels
Printed Name

Division Drilling Supt.
Title

Nov. 2, 2000
Date

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 belief.

August 22, 2000
Date Surveyed

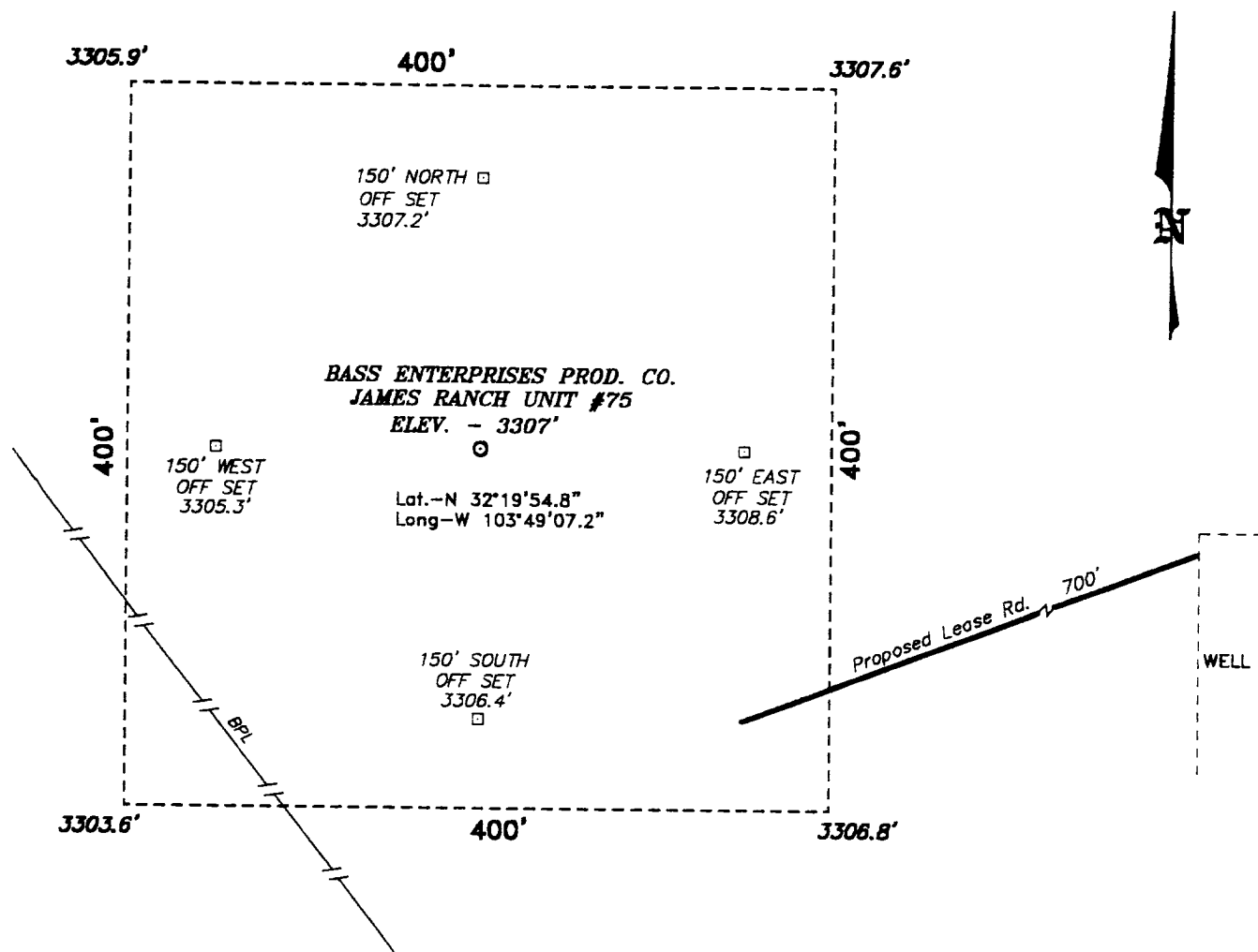
GARY L. JONES
Signature & Seal of Professional Surveyor

7977
W.O. No. 04734

Certified by: Gary L. Jones 7977

BASIN SURVEYS

SECTION 6, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY,
NEW MEXICO.



SCALE: 1" = 100'

DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD.
802(WPP ROAD), GO WEST ON HWY 128 APPROX.
0.75 MILE TO A POINT WHICH LIES APPROX. 2000
FEET SOUTH OF THE PROPOSED WELL LOCATION.

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

W.O. Number: 0471 Drawn By: K. GOAD

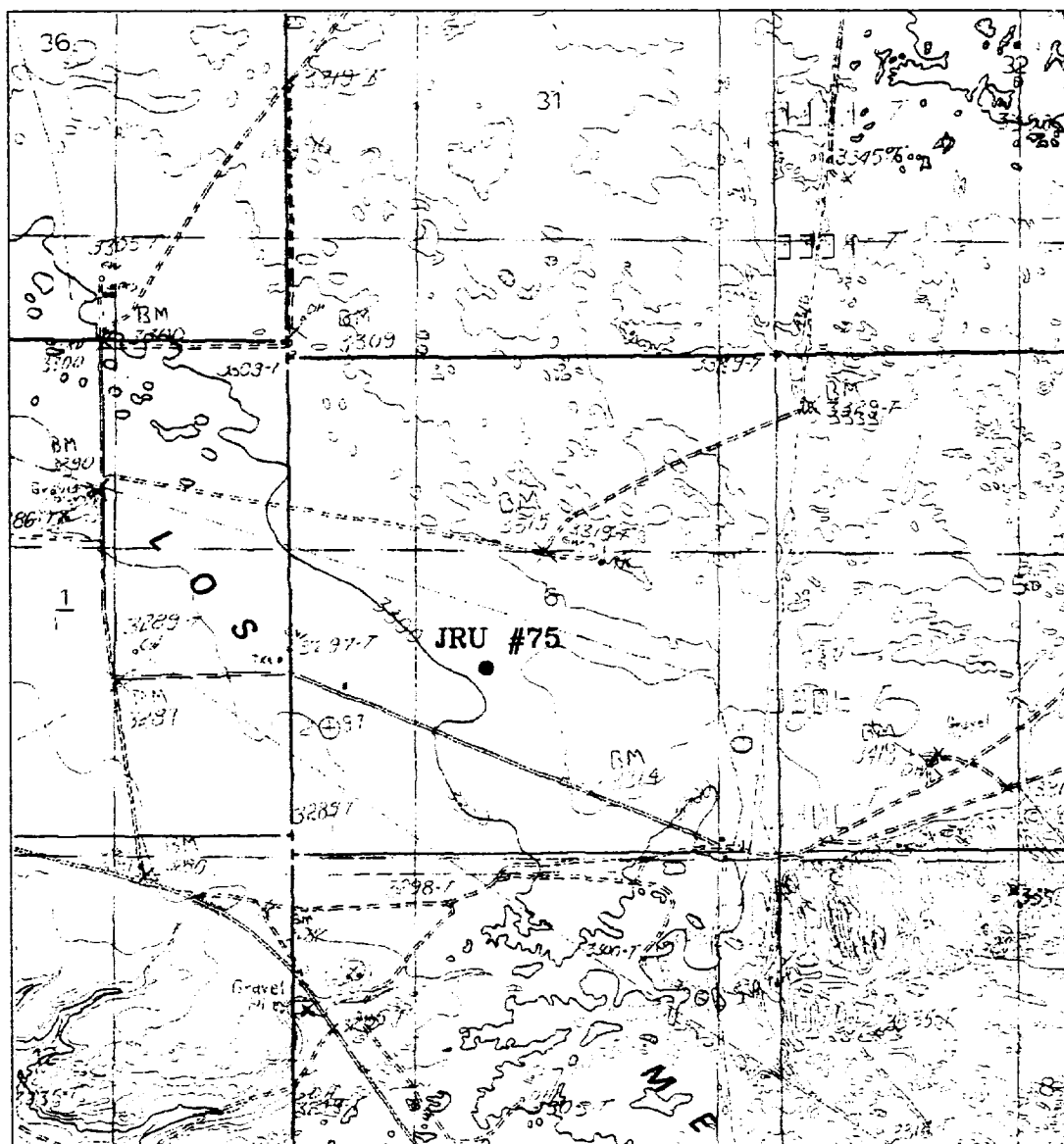
Date: 08-24-2000 Disk: KJG #122 - 0471A.DWG

BASS ENTERPRISES PRODUCTION CO.

REF: James Ranch Unit No. 75 / Well Pad Topo

THE JAMES RANCH UNIT No. 75 LOCATED 1980' FROM
THE SOUTH LINE AND 2130' FROM THE WEST LINE OF
SECTION 6, TOWNSHIP 23 SOUTH, RANGE 31 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 08-22-2000 Sheet 1 of 1 Sheets



JAMES RANCH UNIT #75

Located at 1980' FSL and 2130' FWL
 Section 6, Township 23 South, Range 31 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys

focused on excellence
 in the oilfield

P.O. Box 1786
 120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7315 - Office
 (505) 392-3074 - Fax
 basin-surveys.com

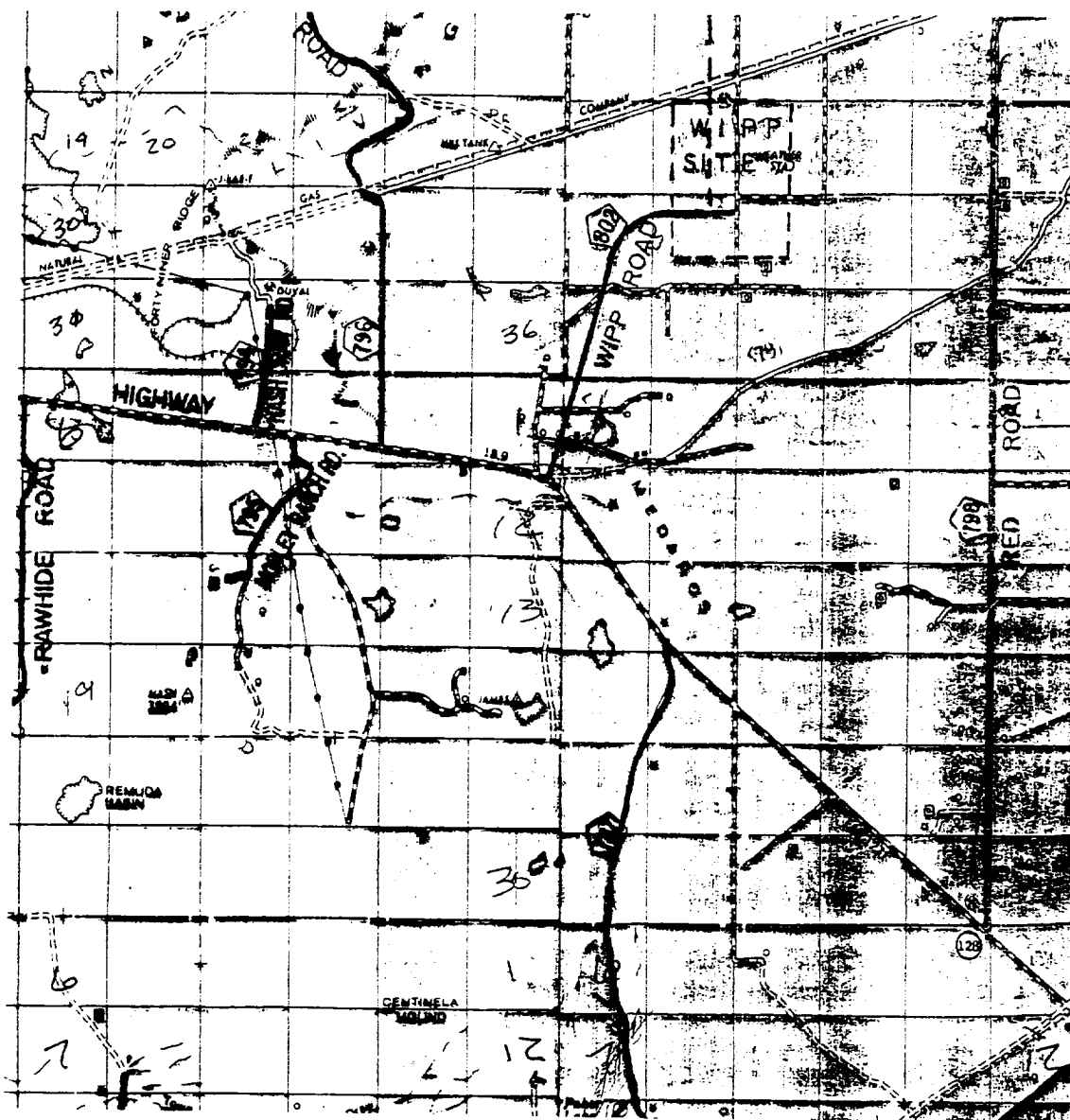
V.O. Number: 1471AA - RGS #12

Survey Date: 08-22-2000

Scale: 1" = 2000'

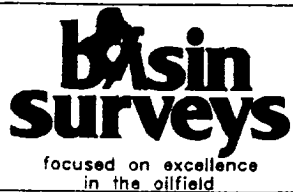
Date: 08-24-2000

BASS ENTERPRISES
PRODUCTION CO.



JAMES RANCH UNIT #75

Located at 1980' FSL and 2130' FWL
 Section 6, Township 23 South, Range 31 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: 0471AA - KJG #122

Survey Date: 08-22-2000

Scale: 1" = 2 MILES

Date: 08-24-2000

BASS ENTERPRISES
 PRODUCTION CO.

**EIGHT POINT DRILLING PROGRAM
BASS ENTERPRISES PRODUCTION CO.**

NAME OF WELL: JAMES RANCH UNIT #75

LEGAL DESCRIPTION - SURFACE: 1980' FSL & 2130' FWL, Section 6, T-23-S, R-31-E, Eddy County, New Mexico.

POINT 1: ESTIMATED FORMATION TOPS

(See No. 2 Below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated Formation Tops: KB 3325' (est)
GL 3307'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Rustler	265'	+3,060'	Barren
T/Salt	704'	+2,621'	Barren
T/Lamar	3,940'	- 615'	Barren
T/Delaware Mtn. Group	3,975'	- 650'	Oil/Gas
T/Shell Marker	6,805'	- 3,480'	Oil/Gas
T/Lwr Brushy Canyon 8A	7,491'	- 4,166'	Oil/Gas
T/Bone Spring	7,775'	- 4,450'	Oil/Gas
T/Bone Spring III	10,935'	- 7,610'	Oil/Gas
T/Wolfcamp	11,070'	- 7,745'	Oil/Gas
T/Wolfcamp Pay	11,133'	- 7,808'	Oil/Gas
TD	11,350'	- 8,025'	

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
16"	0' - 40'	Conductor	Contractor Discretion
11-3/4", 42#, WC-40, STC	0' - 600'	Surface	New
8-5/8", 28# & 32#, WC-50, ST&C	0' - 3950'	Intermediate	New
5-1/2", 20#, P-110, LT&C	0' - 11,350'	Production	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOP equivalent to Diagram 1 will be nipped up on the surface casing head and tested using the rig pumps to 1000 psi (high) & 200 psi (low). A BOP equivalent to Diagram 2 will be nipped up prior to drilling the production hole. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to the lowest working pressure of the equipment being tested. In addition to the high pressure test, a low pressure (200 psi) test will be required. These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Fifteen days after a previous test

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM) – Cont'd...

d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 600'	FW Spud Mud	8.5 - 9.2	45-35	NC	NC	NC	NC
600' - 3950'	Brine Water	9.8 - 10.2	29-30	NC	NC	NC	10.0-10.5
3950' - 6200'	FW	8.3 - 8.6	28-30	NC	NC	NC	9-9.5
6200' - 11,200'	FW Mud	8.6 - 9.2	28-40	6-10	8-10	<100 cc	9-9.5
11,200' - TD	FW Mud	9.2 - 9.5	40-42	6-10	8-10	<100 cc	9-9.5

**Will increase vis for logging purposes only.*

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated.

B) LOGGING

GR-CNL-LDT-AIT from TD to 8-5/8" casing shoe.

GR-CNL from base of 8-5/8" casing to surface.

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT ³ /SX
SURFACE:						
Lead 0 - 300' (100% excess circ to surface)	150	300	Class C + 1/4 pps Celloflake + 4% Gel + 2% CaCl ₂	9.17	13.5	1.75
Tail 300-600' (100% excess circ to surface)	215	300	Class C + 2% CaCl ₂	6.36	14.80	1.34
INTERMEDIATE:						
Lead 0 - 3650' (100% excess circ to surface)	800	3650	50/50 Poz C + 5% Salt + 10% Gel	12.39	12.13	2.21
Tail 3650-3950' (100% excess circ to surface)	100	300	Class C + 1% CaCl ₂	6.32	14.80	1.34

D) CEMENT – Cont'd...

PRODUCTION: A 2-stage cementing procedure with DV tool @ $\pm 7800'$ will be required.

2nd Stage

<u>INTERVAL</u>	<u>AMOUNT SXS</u>	<u>FT OF FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT³/SX</u>
Lead						
0-6000' (50% excess)	815	6000	Premium Plus + 1.0% Zone Seal 2000 + Nitrogen (175-300 scf/bbl)	6.30	8.5-13.0	1.83-1.50
Tail						
6000-7800 (50% excess)	310	1800	Premium Plus	6.30	13.0	1.50
Cap						
0-400'	50	400	Premium Plus + 1% CaCl ₂	6.30	13.0	1.50
1st Stage						
7800'-11,350' (50% excess)	690	3550	15:61:11 Poz H CSE + 2% Salt + 0.5% FL-25 + 0.5% FL-52 + 0.2% CD-32	6.36	14.0	1.36

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. The Bone Spring expected BHP is 5902 psi (max) or an equivalent mud weight of 10.0 ppg @ TD. Due to the tight nature of the reservoir rock (high pressure, low volume), the well will be drilled under balanced utilizing a rotating head. The expected BHT at TD is 170°F. Prior to penetrating the abnormal pressures in the Bone Spring and Wolfcamp, mud monitoring equipment will be installed and operative. H₂S is anticipated in Bone Spring and H₂S Safety equipment will be installed prior to drilling the Bone Spring.

A) Auxiliary Equipment

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

25 days drilling operations

10 days completion operations

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: JAMES RANCH UNIT #75

LEGAL DESCRIPTION - SURFACE: 1980' FSL & 2130' FWL, Section 6, T-23-S, R-31-E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A".

B) Existing Roads:

Between mile markers 10 & 11 on Highway 128 turn north on WIPP road and go 0.8 mile. Turn east and go 1/2 mile. Turn south and go 0.2 miles, turn east and go 0.2 miles to location.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit "A".

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

See Exhibit "A". The new road will be 12' wide and approximately 700' long. The road will be constructed of watered and compacted caliche.

B) Width

12'.

C) Maximum Grade

Not applicable.

D) Turnout Ditches

Spaced per BLM requirements.

E) Culverts, Cattle Guards, and Surfacing Equipment

None.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit "B" indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXISTING OR PROPOSED FACILITIES

Page 2

- A) Existing facilities owned or controlled by lessee/operator:

Bass' facilities located at JRU #17 (1229' NNE of wellbore).

- B) New Facilities in the Event of Production:

Will need separator – different lease.

- C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following flowline construction, those access areas required for continued production will be graded to provide drainage and minimize erosion. The areas unnecessary for use will be graded to blend in the surrounding topography - See Point 10.

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

- A) Location and Type of Water Supply

Fresh water will be hauled from Johnson Water Station 27 miles east of Carlsbad, New Mexico or Mills Ranch. Brine water will be hauled from Champion Brine Water Station, 3.5 miles east and 2.5 miles south of Carlsbad, New Mexico.

- B) Water Transportation System

Water hauling to the location will be over the existing and proposed roads.

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

- A) Materials

If not found on location, caliche will be hauled from the nearest BLM approved source.

- B) Land Ownership

Mills Ranch. A surface land damage agreement has been reached between the operator and Mills Ranch.

- C) Materials Foreign to the Site

No construction materials foreign to this area are anticipated for this drill site.

- D) Access Roads

See Exhibit "A".

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

Page 3

A) Cuttings

Cuttings will be contained in the reserve pit.

B) Drilling Fluids

Drilling fluids will be contained in the reserve pit.

C) Produced Fluids

Water production will be contained in the reserve pit.

Hydrocarbon fluid or other fluids that may be produced during testing will be retained in test tanks. Prior to cleanup operations, any hydrocarbon material in the reserve pit will be removed by skimming or burning as the situation would dictate.

D) Sewage

Current laws and regulations pertaining to the disposal of human waste will be complied with.

E) Garbage

Portable containers will be utilized for garbage disposal during the drilling of this well.

F) Cleanup of Well Site

Upon release of the drilling rig, the surface of the drilling pad will be graded to accommodate a completion rig if electric log analysis indicate potential productive zones. In any case, the "mouse" hole and "rat" hole will be covered. The reserve pit will be fenced and bird netted. The fence will be maintained until the pit is backfilled. Reasonable cleanup will be performed prior to the final restoration of the site.

POINT 8: ANCILLARY FACILITIES

None required.

POINT 9: WELL SITE LAYOUT

A) Rig Orientation and Layout

Exhibit "C" shows the dimensions of the well pad and reserve pits, and the location of major rig components. Only minor leveling of the well site will be required. No significant cuts or fills will be necessary.

B) Locations of Pits and Access Road

See Exhibits "A" and "C".

C) Lining of the Pits

The reserve pit will be lined with plastic.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A) Reserve Pit Cleanup

The pits will be fenced immediately after construction and shall be maintained until they are backfilled. Previous to backfill operations, any hydrocarbon material on the pits' surfaces shall be removed. The fluids and solids contained in the pits shall be backfilled with soil excavated from the site and soil adjacent to the reserve pits. The restored surface of the pits shall be contoured to prevent impoundment of surface water flow. Water-bars will be constructed as needed to prevent excessive erosion. Topsoil, as available, shall be placed over the restored surface in a uniform layer. The area will be seeded according to the Bureau of Land Management stipulations during the appropriate season following restoration.

B) Restoration Plans - Production Developed

The reserve pits will be backfilled and restored as described above under Item A. In addition, those areas not required for production will be graded to blend with the surrounding topography. Topsoil, as available, will be placed upon those areas and seeded. The portion of the site required for production will be graded to minimize erosion and provide access during inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C) Restoration Plans - No Production Developed

The reserve pits will be restored as described above. With no production developed, the entire surface disturbed by construction of the well site will be restored. The site will be contoured to blend with the surrounding topography and provide drainage of surface water. The topsoil, as available, shall be replaced in a uniform layer and seeded according to the Bureau of Land Management's stipulations.

D) Rehabilitation's Timetable

Upon completion of drilling operations, the initial cleanup of the site will be performed as soon as weather and site conditions allow economic execution of the work.

POINT 11: OTHER INFORMATION

Page 5

A) Terrain

Relatively flat.

B) Soil

Caliche and sand.

C) Vegetation

Sparse, primarily grasses and mesquite with very little grass.

D) Surface Use

Primarily grazing.

E) Surface Water

There are no ponds, lakes, streams or rivers within several miles of the wellsite.

F) Water Wells

One water well is located on Mills Ranch (1/4 mile south of this location).

G) Residences and Buildings

J. C. Mills Ranch House is located 1/4 mile south of this location. See Exhibit D.

H) Historical Sites

None observed.

I) Archeological Resources

An archeological survey will be obtained for this area. Before any construction begins, a full and complete archeological survey will be submitted to the Bureau of Land Management. Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site and new access road is on private fee land owned by the Mills Ranch. A damage agreement has been negotiated between the operator and the surface landowner.

K) Well signs will be posted at the drilling site.

L) Open Pits

All pits containing liquid or mud will be fenced and bird-netted.

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

Page 6

(Field personnel responsible for compliance with development plan for surface use).

DRILLING

William R. Dannels
Box 2760
Midland, Texas 79702
(915) 683-2277

PRODUCTION

Mike Waygood
3104 East Green Street
Carlsbad, New Mexico 88220
(505) 887-7329

Keith E. Bucy
Box 2760
Midland, Texas 79702
(915) 683-2277

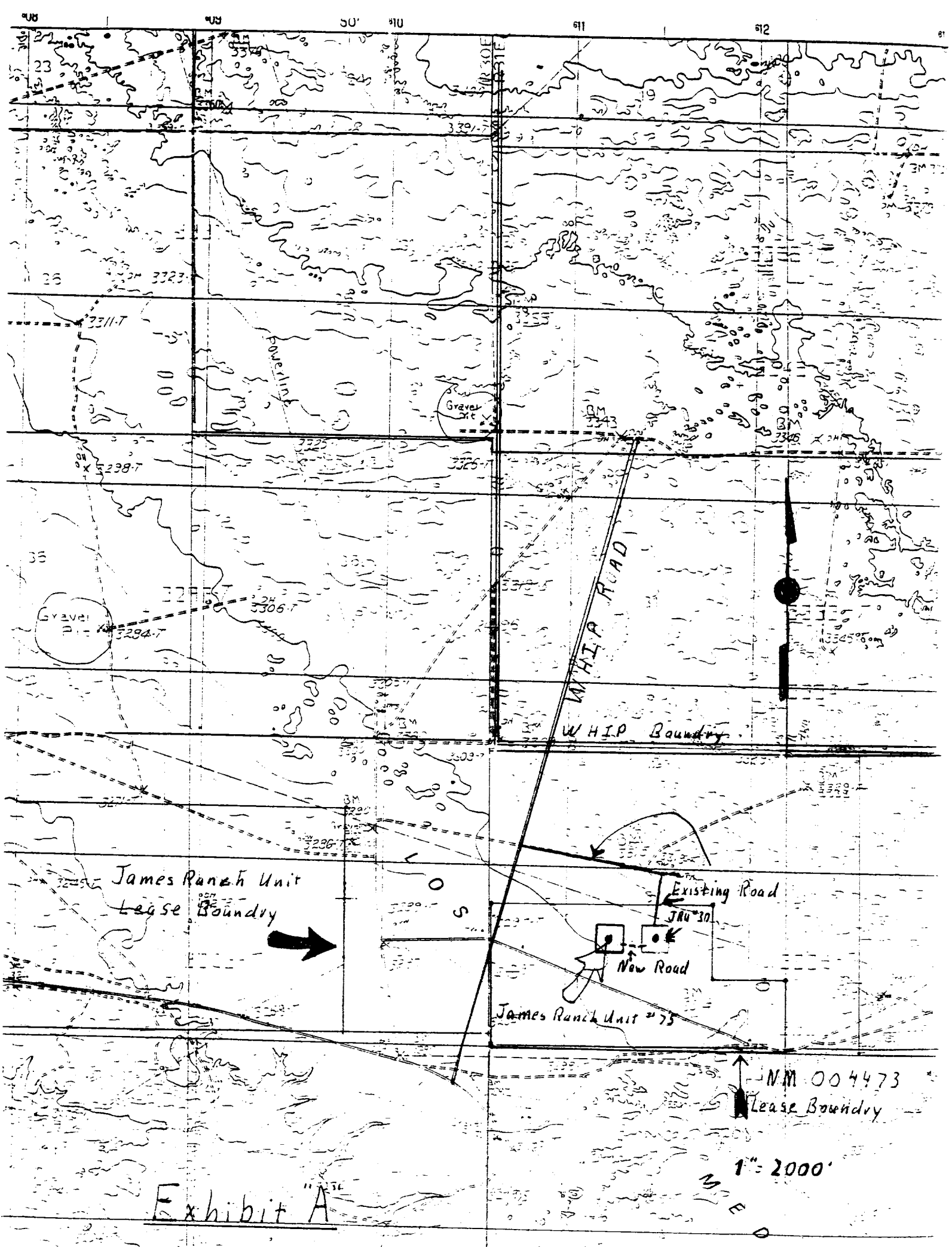
POINT 13: CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Bass Enterprises Production Co. 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.

Nov. 2, 2000
Date

WRD
WRD/BGH:mac

William R. Dannels
William R. Dannels



JAMES RANCH UNIT #75 UPDATED FOR WOLFCAMP WELL 1980' FSL & 2130' FWL, SEC 6, T23S, R31E

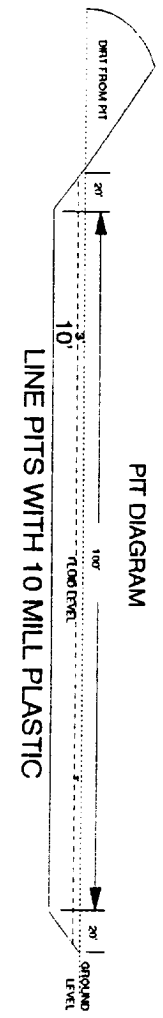
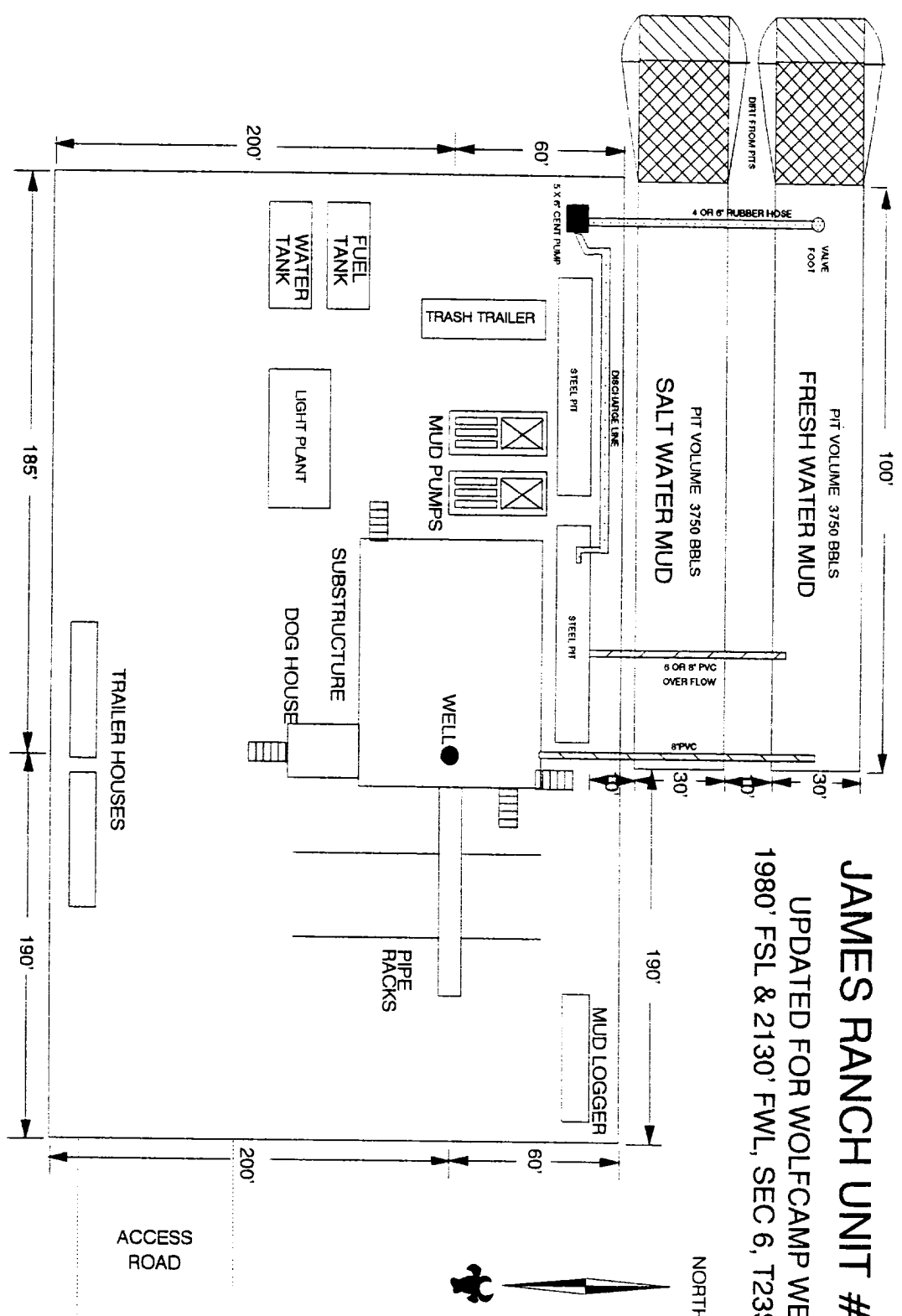
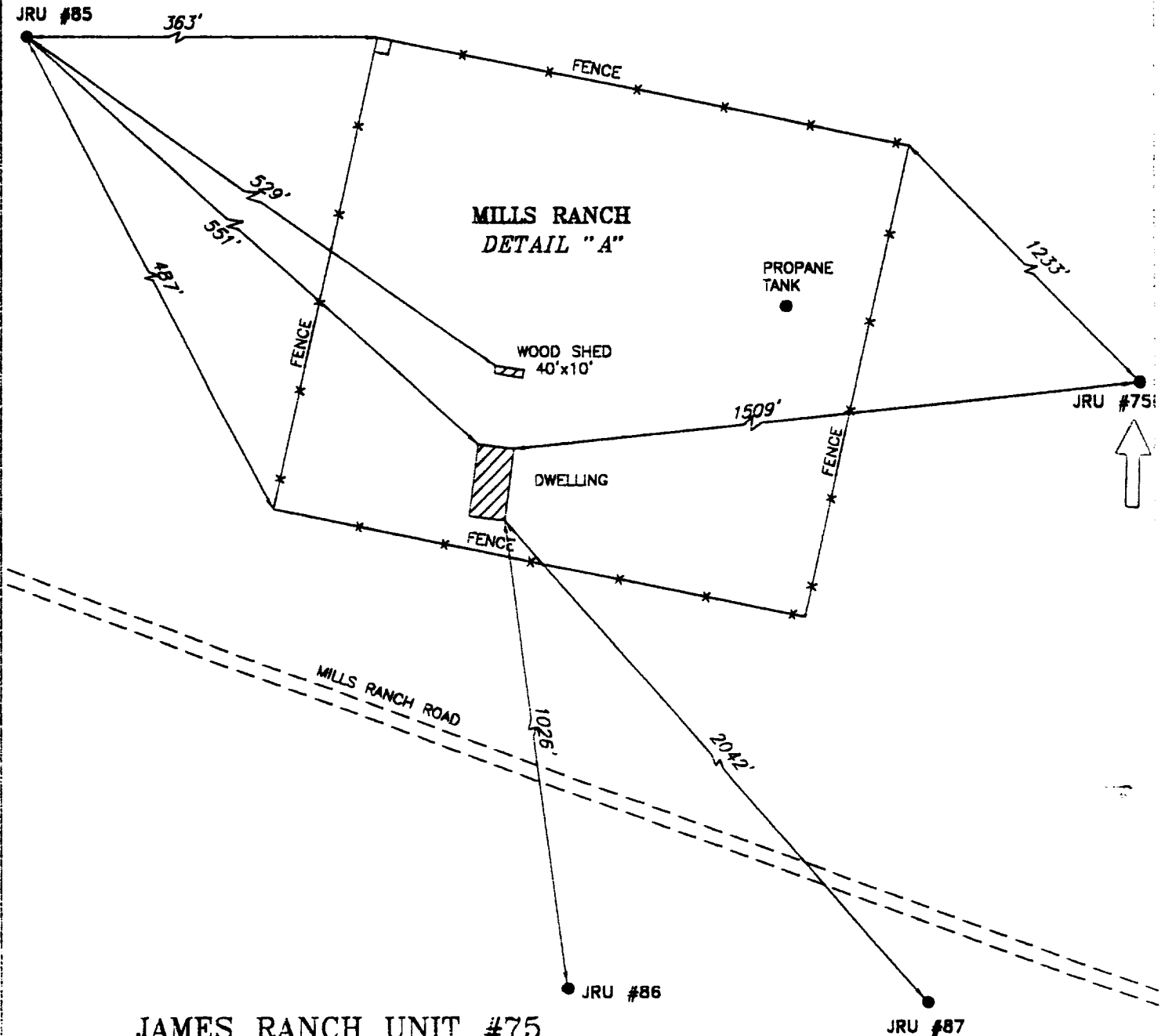


EXHIBIT "C"

BEP CO - WTD PRODUCTION

OCT - 2 2000

RECEIVED



JAMES RANCH UNIT #75

Section 6, Township 23 South, Range 31 East,
N.M.P.M., Eddy County, New Mexico.

Exhibit D

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: BASS05313 - KUD #122

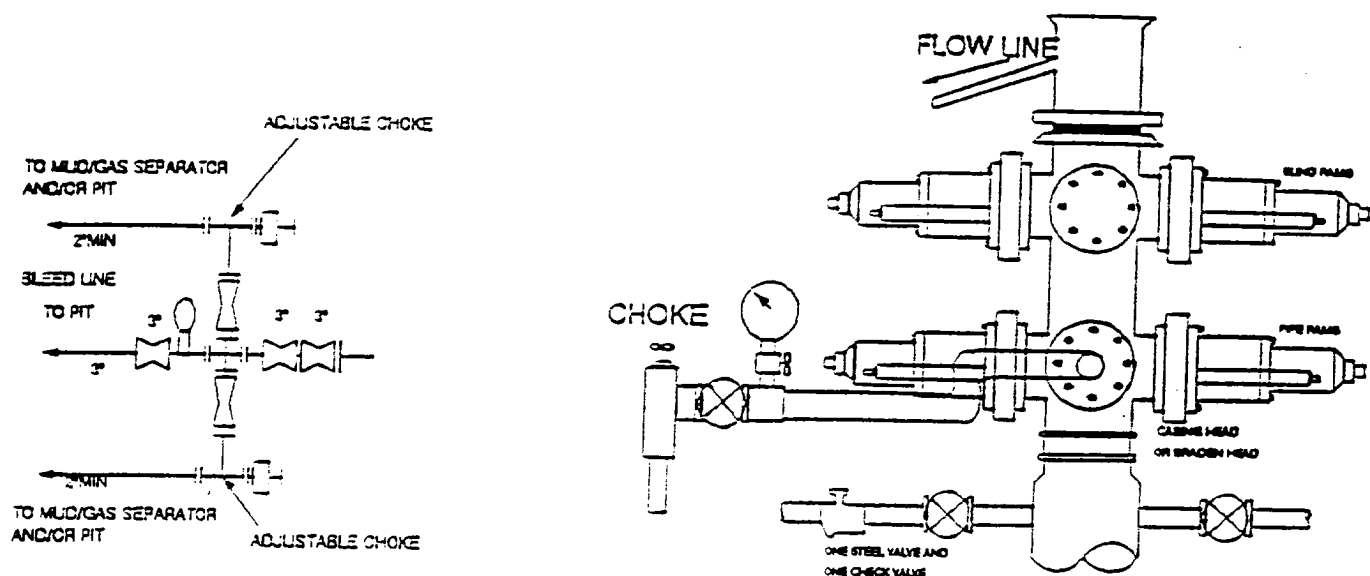
Survey Date: 09-20-2000

Scale: NONE

Date: 09-25-2000

**BASS ENTERPRISES
PRODUCTION CO.**

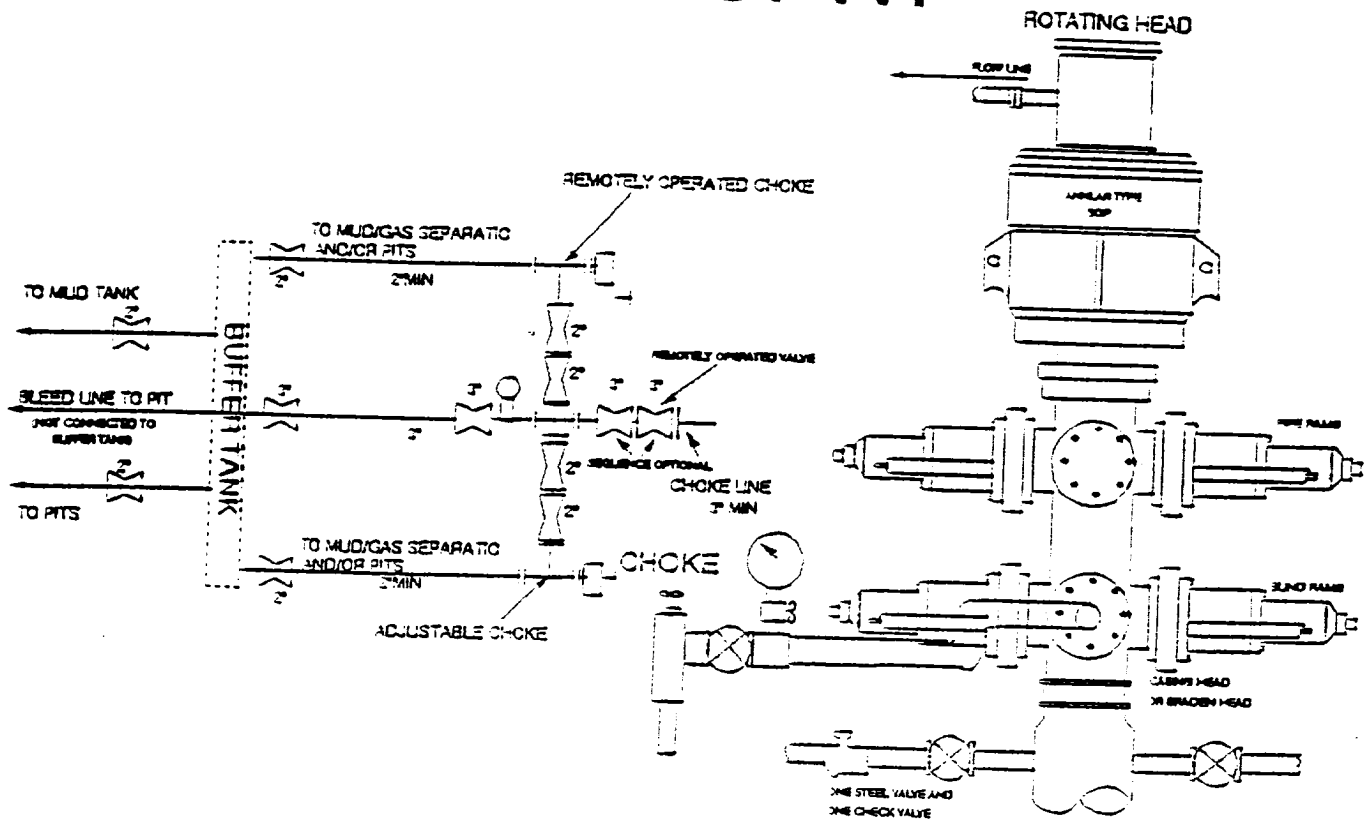
3000 PSI WP



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate blowout preventer with lower rams for pipe and upper rams blind, all hydraulically controlled.
- B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter.
- C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- E. All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.
- F. Manual controls to be installed before drilling cement plug.
- G. Valve to control flow through drill pipe to be located on rig floor.
- H. All chokes will be adjustable. Choke spool may be used between rams.

5000 PSI WP



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- One double gate blowout preventer with lower rams for pipe and upper rams blind, all hydraulically controlled.
- Opening on preventers between rams to be flanged, studed or clamped and at least two inches in diameter.
- All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.
- The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.
- Manual controls to be installed before drilling cement plug.
- Valve to control flow through drill pipe to be located on rig floor.
- All chokes will be adjustable. Choke spool may be used between rams.

DIAGRAM 2