



E-06-60

FORM APPROVED OMB No. 1004-0136 Expires March 31, 2007

RECEIVED UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

MAR 3 0 2006

5. Lease Serial No. NMNM0522A

APPLICATION FOR PERMIT TO DRI	LL OR R	EENCED-ART	esia	6. If Indian, Allotte	or Tribe	Name
1a. Type of Work: X DRILL REENTER	<u> </u>	1796		7. If Unit or CA Agreement, Name and No. NMNM71016X		
1b. Type of Well: X Oil Well Gas Well Other	X	'	ple Zone	8. Lease Name and V Poker Lake Unit	Vell No.	199
2. Name of Operator Bass Enterprises Produciton Co.				9. API Well No. 30-015	54	757
3a. Address P. O. Box 2760 Midland, TX 79702		10. (include area code) 33-2277 & J. 9	60	10. Field and Pool, or		MONYOU
 Location of Well (Report location clearly and in accordance with a At surfaceNESW 1700' FSL & 1330' FWL, Lat 32.1108 At proposed prod. zone Same 	-	·		11. Sec., T., R., M., or Sec 28, T24S, R3	Blk, and	Survey or Area
14. Distance in miles and direction from nearest town or post office* 21 miles East of Malaga, NM				12. County or Parish Eddy County		13. State NM
15. Distance from porposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of 960.00	Acres in lease	17. Spacin 320.00	cing Unit dedicated to this well		
18. Distance from proposed location* 3050' to nearest well, drilling, completed, applied for, on this lease, ft.	19. Propos	•	th 20. BLM/BIA Bond No. on file NM2204			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3473' GL		ximate date work will star /2006	rt*	23. Estimated duration 100 days	n	
		achments				<u>.</u>
 The following, completed in accordance with the requirements of Onshor Well plat certified by a registered surveyor. A Drilling Plan A Surface Use Plan (if the location is on National Forest System Land SUPO shall be filed with the appropriate Forest Service Office). 		4. Bond to cover th Item 20 above). 5. Operation certification.	e operations cation.	ais form: sunless covered by an ex	C	•
Signature Sulders		e (Printed/Typed) nette Childers			Date	02/24/2006
Title Administrative Assistant						
Approved by (Signature) /s/ Tony J. Herrell	Nam	e (Printed/Typed) /S/ Tony	J. Her	rell	Date M	IAR 2 9 201
Title FIELD MANAGER	Offi	CARLS	BAD F	IELD OFFIC	CE	

Title 18 U.S.C Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States and false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

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

*(Instructions on page 2)

Conditions of approval, if any, are attached.

operations thereon.

Carlobed Controlled Water Dacke

Witness Surface Casing

APPROVAL SUBJECT TO General requirements and SPECIAL STIPULATIONS ATTACHED

APPROVAL FOR 1 YEAR

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

Additional Operator Remarks:

Surface casing to be set into the Rustler below all fresh water sands.

The intermediate casing will be set through the salt/anhydrite section.

7" Production Cement will tie back 450' into the 9-5/8" intermediate casing.

The 7-5/8" liner will top set any Devonian porosity interval and will be fully cemented.

The existing 400' x 400' Arch Survey Area will be enlarged to 750' x 750'.

DISTRICT I 1825 N. Propen de., Hobbs, AM BERGE

DISTRICT II 811 South First, Artesia, NW 88210

DISTRICT III 1000 His Brates Rd., Astro, NM 87410

DISTRICT IV 2048 South Pacheso, Sents Ps. NM 57505 State of New Mexico

Emergy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Leane - 4 Copies Fee Leane - 5 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco

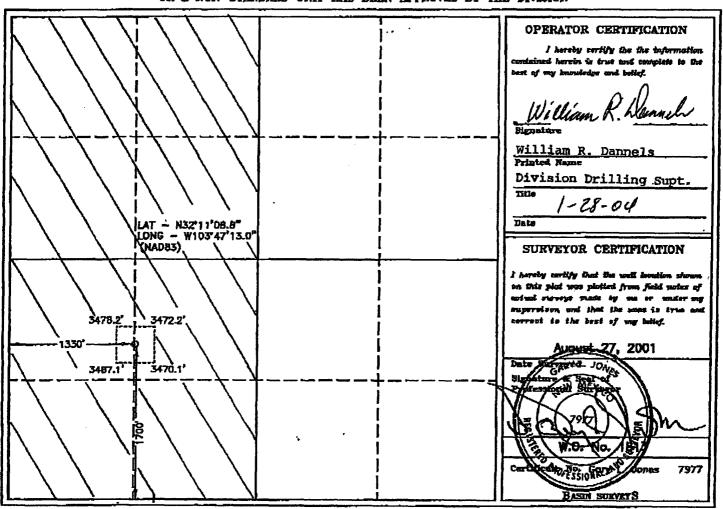
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

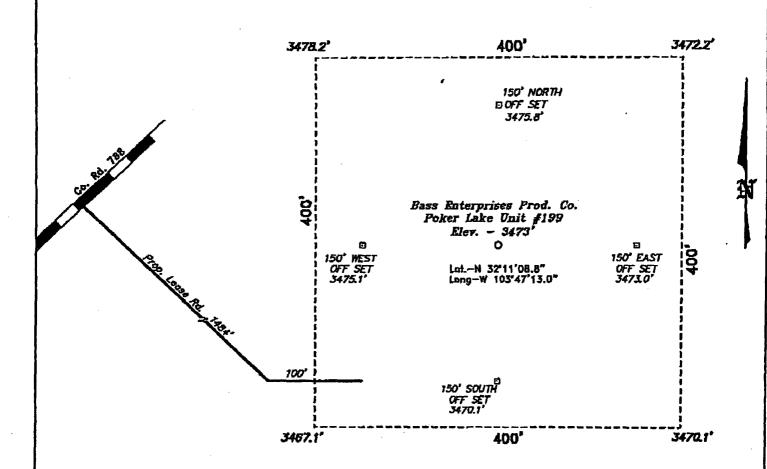
WELL LOCATION AND ACREAGE DEDICATION PLAT

API 30-015-32	Number 2170		8	Paol Code 196	3	Oker Lale	Mc Arow		
Property 00179			Property Name POKER LAKE UNIT					Well Number 199	
00RID N 00180			Operator Name BASS ENTERPRISES PRODUCTION COMPANY					Elevation 3473'	
					Surface Loc	ation			
UL or lot No.	Section	Township	Renge	Let Idn	Feet from the	North/South line	Feet from the	East/West hine	County
K	28	24 S	31 E		1700	SOUTH	1330	WEST	EDDY
			Bottom	Hole Lo	eation if Diffe	erent From Sur	face	_	
UL or jot No.	Section	Township	Range	Lot Idu	Pest from the	North/South line	Feet from the	East/West line	County
Pedicated Acre 320	Joint o	r Infill Co	ngolids fion	Code Dr	der No.	<u> </u>			

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



SECTION 28, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., NEW MEXICO. EDDY COUNTY,



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 128 & CO. RD. 788, GO SOUTHWEST ON CO. RD. 788 APPROX. 5.5 MILES TO A PROPOSED LEASE ROAD.

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

W.O. Number: 1813 Drawn By: K. GOAD Date: 08-28-2001 Disk: KJG CD#3 -1813A.DWG 100 100 200 FEET FUEL ELECT SCALE: 1" = 100"

BASS ENTERPRISES PRODUCTION CO.

REF: Paker Lake Unit No. 199 / Well Pad Topo THE POKER LAKE UNIT No. 199 LOCATED 1700' FROM THE SOUTH LINE AND 1330' FROM THE WEST LINE OF SECTION 28, TOWNSHIP 24 SOUTH, RANGE 31 EAST. H.M.P.M., EDDY COUNTY, NEW MEXICO.

Sheet Survey Date: 08-27-2001 Sheets

EIGHT POINT DRILLING PROGRAM BASS ENTERPRISES PRODUCTION CO.

NAME OF WELL: POKER LAKE UNIT #199

LEGAL DESCRIPTION - SURFACE: 1700' FSL & 1330' FWL, Section 28, T24S, R31E, 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 3499' (est) GL 3473'

FORMATION	ESTIMATED TOP FROM KB	ESTIMATED SUB SEATOP	BEARING
T/Rustler T/Salt B/Salt T/Lamar Lime T/Delaware Sands T/Bone Spring T/Wolfcamp T/Wolfcamp Detrital T/ Atoka T/Morrow T/Middle Morrow T/Lower Morrow T/Mississippian T/Woodford T/Devonlan TD	596 914' 4,099' 4,439' 4,479' 8,214' 11,544' 12,819' 13,704' 14,404' 14,884' 15,324' 16,069' 16,399' 16,519' 16,600'	+2,903' +2,585' - 600' - 940' - 980' - 4,715' - 8,045' - 9,320' -10,205' -11,385' -11,825' -12,570' -12,900' -13,020' -13,101'	Barren Barren Barren Oil/Gas
	10,000	10,101	

POINT 3: CASING PROGRAM

TYPE	INTERVALS	<u>PURPOSE</u>	CONDITION
30°	0' - 40'	Conductor	New
20", 94#, J-55, BTC	0' - 850'	Surface	New WITHESS
13-3/8", 68#, N-80, BTC	0' - 4,450'	Intermediate	New
9-5/8", 53.5#, P-110, LTC	0' 12,700'	Intermediate	New
7-5/8", 42.8#, P-110, LTC	12,400' - 16,525'	Drilling Liner	New
5", 18#, L-80, STL	16,225' - TD	Production Liner	New
5", 18#, L-80, STL	16,225 - 10	Production Liner	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAMS)

A BOP equivalent to Diagram 1 will be nippled up on the surface, first, and second intermediate casings. Bass requests a waiver to Onshore Order #2 which states the BOP, and associated equipment must be tested to the rated working pressure or 70% of the interval yield pressure. Our plans are to test the BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydrostatically to 1000 psi on the surface installation, then 3000 psi on the first intermediate, and 10,000 psi on the second intermediate casing. The annular will be tested to 2500 psi. In addition to the high-pressure test, and a low pressure (250 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
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip. See attached Diagram 1 for the minimum criteria for the choke manifold.

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	<u>YP</u>	FL_	Ph
0' - 850'	FW	8.5 - 9.2	45-35	NC	NC	NC	9.5
850' - 4,450'	CBW	9.2 - 10.0	28-30	NC	NC	NC	9.5
4,450' - 11,500'	FW	8.6 - 8.9	28-30	4	2	NÇ	9.5
11,500' - 12,700'	CBW	8.6 - 9.0	28-30	6	4	NC	9.5
12,700' - 16,525'	CBW/Polymer	9.0 - 14.0	32-55	12-20	12/22	10-15	9.5 - 10.0
16,525' - TD	CBW	8.6 9.0	28-35	2-4	2-4	NC	9.5 – 10.0

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

Dill stem test may be performed on significant shows in zones of interest, but none are anticipated.

B) LOGGING

Run #1:

GR-CNL-LDT-LLD run from 9-5/8" TD to 1st ICP, GR-CLN to surface. May run logging suite across Delaware prior to drilling below 7400' if mud log shows warrant.

Run #2:

GR-CNL-LDT-LLD run from 1st Liner TD to second ICP, FMI across Wolfcamp as needed.

Run #3:

GR-CNL-LDT-LLD run from TD to 1st Liner CP.

C) CORING

No cores are anticipated.

POINT 6: TECHNICAL STAGES OF OPERATION - Contd...

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D) CEMENT:

INTERVAL SURFACE	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT ³ /SX			
Lead 0'-550' (100% excess) Tail	930	550	Permian Basin Critical Zone + 1/8#/sx Pol-e-flake	10.30	12.80	1.89			
550'-850' (100% excess)	675	300	Premium Plus + 2% CaCl ₂ + 1/8#/sx Pol-e-flake	6.32	14.80	1.34			
INTERMEDIATE	AMOUNT	FT OF							
INTERVAL Lead	sxs	FILL	TYPE	GALS/SX	<u>PPG</u>	FT ³ /SX			
0'-3800' (100% excess)	2030	3800	Interfill C + 1/8#/sx Pol-e-flake	14.10	11.90	2.45			
Tail 3800'-4450' (100% excess)	700	650	Premium Plus + 2% CaCl ₂	6.34	14.80	1.34			
PRODUCTION (Two stage w/DV tool @ 9000' and circulate cement to 4000') AMOUNT FT OF									
INTERVAL 1 ^{et} Stage	<u>sxs</u>	FILL_	TYPE	GALS/SX	<u>PPG</u>	FT ³ /SX			
Lead 9000'-12,000' (50% excess)	580	3000	Interfill H + 5 pps Gilsonite + 0.5% Halad 9 + 1/8 pps Pol-e-flake	13.61	11.90	2.46			
Tail 12,000'-12,700' (50% excess)	200	700	Super H + 0.5% Halad 344 + 0.4% CFR3 + 5 pps Gilsonite + 1 pps Salt + 0.2% HRT	8.20	13.00	1.67			
2 nd Stage Lead									
4000'-8,300' (50% excess) Tail	800	4300	Interfill H + 1/8 pps Pol-e-flake + 0.5% Halad 9	14.00	11.90	2.45			
8,300'-9,000' (50% excess)	200	700	Super H + 0.5% Halad 344 + 0.4% CFR3 + 5 pps Gilsonite + 1 pps Salt + 0.2% HRT	8.20	13.00	1.67			
DRILLER LINER 12,400'-16,525' (25% excess 300' (410 overlap)	4125	Class H + 0.8% Halad 322 + 0.6% Halad 344 + 0.2% HR-7 + 5 pps Microbond M	5.68	15.40	1.28			
PRODUCTION LIN 16,225'-16,600' (25% excess 300' o	100	375	Class H + 0.8% Halad 322 + 0.6% Halad 344 + 0.2% HR-7 + 5 pps Microbond M	5.68	15.40	1.28			

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout the Delaware and Bone Spring. The Lower Wolfcamp may be abnormally pressured with a BHP of 8100 psi or an equivalent mud weight of 12.2 ppg. The Atoka may be abnormally pressured with expected BHP of 9975 psi (max) or an equivalent mud weight of 13.8 ppg. The Morrow expected BHP is 8750 (max) or an equivalent mud weight of 10.6 ppg @ the base of the zone. The Devonian is expected to be subnormally pressured with an expected BHP of 7070 psi (max) or an equivalent mud weight of 8.2 ppg. Due to the tight nature of the reservoir rock (high pressure, low volume), the well will be drilled under balanced utilizing a rotating head. H2S is anticipated in high concentrations in the Devonian, but none should be encountered in any upper zones.

POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

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

B) Anticipated Starting Date

Upon approval

100 days drilling operations

25 days completion operations

BGH/mac January 29, 2004

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: POKER LAKE UNIT #199

LEGAL DESCRIPTION - SURFACE: 1700' FSL & 1330' FWL, Section 28, T24S, R31E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A".

B) Existing Roads:

From State Hwy 128 & CR 788, go southwest 5.5 miles on Buck Jackson county road, then turn left on proposed caliche road for approximately 0.3 miles into location.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit "A",

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

See Exhibit "A and survey plats. The new road will be approximately 1,584' long.

B) Width

12' wide.

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

A) Existing facilities within one mile owned or controlled by lessee/operator.

None.

B) New Facilities in the Event of Production:

Will build new facilities on this location.

C) Rehabilitation of Disturbed Areas Unnecessary for Production:

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 with the surrounding topography (See Point 10).

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

A) Location and Type of Water Supply

Brine water will be hauled from commercial facilities. Fresh water to be hauled from Carlsbad, New Mexico; Mills Ranch; or Diamond and Half Water Station.

B) Water Transportation System

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

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

A) Materials

Surface caliche will be used if possible. If not found on location, caliche service will be nearest BLM – approved open pit.

B) Land Ownership

Federally owned land for both surface location and bottom hole location.

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", Exhibit "B", and survey plats.

→ PAULA

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POINT 7: ANTICIPATED RESERVOIR CONDITIONS

A) Cuttings

Cuttings will be contained in the plastic lines reserve pit.

B) Drilling Fluids

Drilling fluids will be contained in the plastic lined reserve pit.

C) Produced Fluids

Water production will be contained in the plastic lines 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 if the drilling pad will be graded to accommodate a completion rig if electric log analysis indicates potential productive zones. In any case, the "mouse" hole and the "rat" hole will be covered. The reserve pit will be bird netted and fenced only in the event of livestock present. 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

A) None.

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 Exhibit "A" and "B".

C) Lining of the pits

The reserve pits will be lined with plastic.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A) Reserve Pit Cleanup

The pits will be fenced immediately after spudding only in the event of livestock present and maintained until backfilled. Prior to back filling, 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

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

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) Rehabilitations Time table

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

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.

→ PAULA

POINT 11: OTHER INFORMATION - Con't...

E) Surface Water

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

F) Water Wells

There is a windmill located ± 3500' (0.66 miles) south southeast of this location.

G) Residences and Buildings

No buildings within several miles of well site.

H) Historical Sites

None observed.

Archeological Resources

A 400' X 400' archeological survey has been obtained for this area. (Archaeological Services by Laura Michalik on 10/31/01.) Before any construction begins, a second 750' X 750' survey expanding the original study will be obtained with a full and complete archeological survey 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 access road are both on federally owned land. No ROW will be required.

- K) Well signs will be posted at the drilling site.
- L) Open Pits

All pits containing liquid or mud will be fenced only in the event of livestock present and bird netted.

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

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

DRILLING William R. Dannels Box 2760 Midland, Texas 79702 (432) 683-2277 PRODUCTION
Mike Waygood
3104 East Green Street
Carlsbad, New Mexico 88220
(505) 887-7329

Kent Adams Box 2760 Midland, Texas 79702 (432) 683-2277

POINT 13: CERTIFICATION

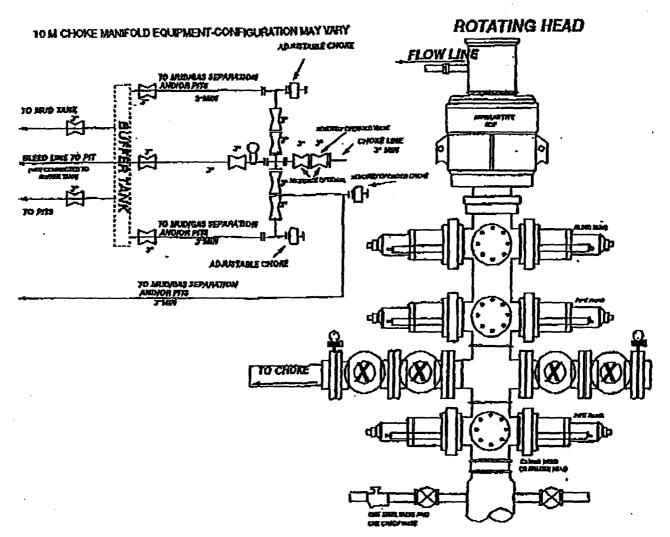
I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated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

1-28-04 Date

BGH:mac

William R. Dannels

10-M. WP BOPE WITH 5-M WP. ANNULAR



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS:

- A. Opening between the ram to be flanged, studded, or clamped.
- B. All connections from operating manifolds to preventers to be all steal hose or tube a minimum of one inch diameter.
- C. 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 preventors.
- D. ALL connections to and from preventer to have a pressure rating equivalent to that of the BOPs.
- E. Manual controls to be installed before drilling cement plug.
- F. Kelly cock to be installed on kelly.
- 6. Inside blowout preventer to be available on rig floor.
- H. Dual operating controls: one located by drillers position and the other located a safe distance from the rig floor.
- I. All chokes will be adjustable.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

Bass Enterprises Production Company

Well Name & No.

Poker Lake Unit #199

Location:

1700' FSL, 1330' FWL, Section 28, T. 24 S., R. 31E., Eddy County, New Mexico

Lease: NM-0522 A

1. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

- A. Well spud
- B. Cementing casing: 20 inch 13-3/8 inch 9-5/8 inch 7-5/8 inch 5 inch liner
- C. BOP tests
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

1545

II. CASING:

1. The <u>20</u> inch surface casing shall be set at <u>approximately 850 feet, above the top of the salt, and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.</u>

1-14-X-14-

- 2. The minimum required fill of cement behind the 13-3/8 inch first intermediate casing is to be sufficient to circulate to the surface.
- 2. The minimum required fill of cement behind the <u>9-5/8</u> inch second intermediate casing is <u>to be sufficient to tie</u> <u>back into the 9-5/8"casing at least 500 feet.</u>
- 3. The minimum required fill of cement behind the <u>7-5/8 inch and 5 inch</u> production liners is <u>to be circulated to the top of the liner</u>.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>20</u> inch surface casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required <u>for drilling the surface</u> <u>and the intermediate hole</u> shall be shall be 2000 psi.
- 3. The requested variance to test the BOPE to 1000 psi on the surface casing with rig pumps is approved.
- 4. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the first intermediate casing shall be 5000 psi.

- 5. Minimum working pressure of the blowout preventer and related equipment (BOPE) required <u>for drilling below the second intermediate casing</u> shall be shall be <u>10000</u> psi.
- 6. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - 7. Any wells that penetrate the Wolfcamp, the BOPE shall be tested:
 - The tests shall be done by an independent service company.
 - The results of the test shall be reported to the appropriate BLM office.
 - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.

• Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

acs 12/4/01 2/11/04 – RS 3/9/06 – RS2