

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1.a TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM 20307		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo		
2. NAME OF OPERATOR Pure Resources		7. UNIT AGREEMENT NAME 59216		
3. ADDRESS AND TELEPHONE NO. P.O. Box 850, Bloomfield New Mexico		8. FARM OR LEASE NAME, WELL NO. Navajo O18-#10		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirement) At surface 660' FSL and 1975' FEL At proposed prod. zone Same as Surface		9. API WELL NO. 30-045-30936		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 21 miles south Bloomfield NM		10. FIELD AND POOL OR WILDCAT Basin Dakota		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE FT (Also to nearest drg. Unit line, if any) 660'		11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA O Sec. 18, T-25-N, R-10-W		
18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT. 2400'		12. COUNTY OR PARISH San Juan		
16. NO. OF ACRES IN LEASE 320		13. STATE NM		
19. PROPOSED DEPTH 6310'		17. NO. OF ACRES ASSIGNED TO THIS WELL 319.335		
20. ROTARY OR CABLE TOOLS Rotary		22. APPROX. DATE WORK WILL START* December 15, 2001		
21. ELEVATIONS (Show whether DF, RT, GR,) 6535' GR				
23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	H-40 9-5/8"	32.3#	350'	285 SACKS "B" TOC @ SURFACE
8-3/4"	K-55 7"	20#	3000'	300 SACKS TYPE III TOC @ SURFACE
6-1/4"	N-80 4-1/2"	11.6#	6310'	SACKS 65/35 POZ TYPE III TOC TIED INTO 7" CAS

"Expedited APD/ROW"

Pure plans to drill the Navajo O18-#10, and complete in the Basin Dakota.

BOP- One double gate BOP with 3-1/2" pipe and blind rams, one choke manifold with adjustable and positive chokes, an accumulator will hydraulically operate BOP with 1 1/2 times the necessary capacity to close the rams and retain a minimum of 200 psi above recharge. Rotating head will be utilized during the drilling of the 6-1/4" hole.

(Schematics are attached)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

APPROVED FOR THE BLM BY [Signature] AND SUBJECT TO COMPLETION WITH ATTACHED "TECHNICAL REQUIREMENTS"

IN ABOVE SPACE DESCRIBED 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 [Signature] TITLE San Juan Basin Area Drig/Prod Foreman DATE 11/22/01
MIKE C. PHILLIPS

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 1/7/02

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 application to conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY [Signature] TITLE AFM DATE 1/7/02

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, make 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.

NMOCD

K

1625 N. French Dr., Hobbs, N.M. 88240

Energy, Minerals & Natural Resources Department

Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- <u>30936</u>		² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code <u>29216</u>	⁵ Property Name NAVAJO <u>018</u>		⁶ Well Number 10
⁷ GRID No. 189071	⁸ Operator Name PURE RESOURCES		⁹ Elevation 6535'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	18	25-N	10-W		660	SOUTH	1975	EAST	SAN JUAN

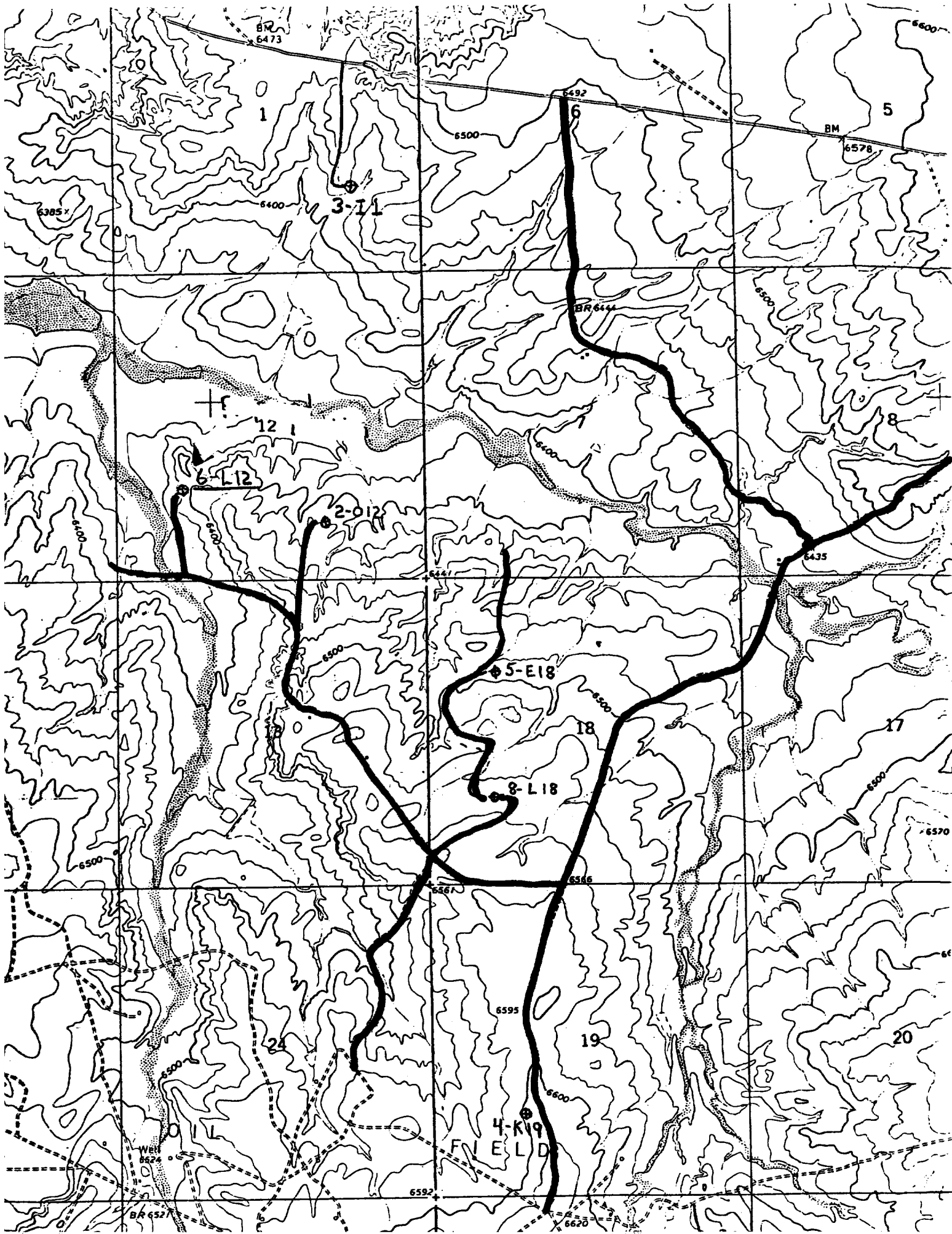
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres <u>380</u> <u>319.33</u>		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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

18

LOT 1	LOT 2	SEC. CORNER FD. GLO BC.1932	S 00-4-16 W 5291.45' (M)	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <u>[Signature]</u> Signature Mike Phillips Printed Name San Juan Basin Drilling/ Production Foreman Title Nov. 1st, 2001 Date	
LOT 3	LOT 4	SEC. CORNER FD. GLO BC.1932	N 89-49-40 W 2635.73' (M)	SEC. CORNER FD. GLO BC.1932	18 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. <u>[Signature]</u> Signature and Seal of Professional Surveyor: 8894 Certificate Number



PURE RESOURCES
NAVAJO 180-10
660' FSL, 1,975' FEL, SEC. 18, T-25-N, R-10-W
SAN JUAN CO. NEW MEXICO

8 POINT DRILLING PLAN

1. ESTIMATED FORMATION TOPS

<u>FORMATION NAME</u>	<u>DEPTH FROM GL</u>
Pictured Cliffs	1,415'
Cliff House	3,070'
Point Lookout	3,720
Mancos	4,170'
Gallup	4,940'
X-Marker	6,065'
Dakota	6,095'
Y-Marker	6,260'
Burro Canyon	6,310'

2. OIL, GAS, WATER, OR OTHER MINERAL BEARING ZONES

<u>EXPECTED GAS ZONES</u>	<u>DEPTH FROM GL</u>
Dakota	6065-6260'

<u>EXPECTED WATER ZONES</u>	<u>DEPTH FROM GL</u>
Cliff House	3070'

Possible water zones will be protected by 7" intermediate casing and/or 4-1/2" production strings, 7" cemented to surface, and 4-1/2" casing cement tied in to 7".

2. PRESSURE CONTROL BOP'S AND RELATED EQUIPMENT

Casing Head: 7" x 11" – 3000 psi W.P.

BOP Stack and Related Equipment: (See Attachment No. 1 &2).

NAVAJO 180-10
DRILLING PROGRAM – PAGE 2

One double-gate BOP with 4-1/2” and then 3-1/2” pipe and blind rams.
One choke manifold with adjustable and positive chokes.
An accumulator will hydraulically operate the BOP with 1-1/2 times the necessary capacity to close the rams and retain a minimum of 200psi above recharge. The remote unit will be located in the bottom “dog house” or on the ground between the “dog house” and the toolpushers trailer. A rotating head on top of the BOP stack will be utilized when necessary.

Testing Procedure:

The BOP and related equipment will be tested in accordance with the provisions of Onshore Oil and Gas Order No. 2.

BOP’s will be operationally tested daily and each test will be logged in the IADC Daily Drilling Report.

Blooie Line:

The blooie line and related equipment will meet all requirements of Onshore Oil and Gas Order No. 2.

4. **CASING AND CEMENTINNG PROGRAM**

SURFACE CASING (*Spud Mud*)

<u>Age</u>	<u>Depth</u>	<u>Hole Size</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
New	0-350’	12-1/4”	9-5/8”	32.3#	H-40	ST&C

INTERMEDIATE CASING (*FW Mud*)

<u>Age</u>	<u>Depth</u>	<u>Hole Size</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
New	0-3300’	8-3/4”	7”	20#	K-55	ST&C

PRODUCTION CASING (*Air Dusting*)

<u>Age</u>	<u>Depth</u>	<u>Hole Size</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
New	0-TD	6-1/4”	4-1/2”	11.6#	I-80	LT&C

MINIMUM SAFETY FACTORS

Collapse: 1.125
Tension: 1.8
Burst: 1.0

NAVAJO 180-10
DRILLING PROGRAM – PAGE 3

Cementing Program

1. The 9-5/8" surface casing will be cemented to the surface with 200 sacks of class Type III "B" cement + 2 Cacl₂ and ¼# per cello flake. (1.39 cu/ft) 14.5ppg
2. The 7" intermediate casing will be cemented to surface with; 325 sacks of type III (35:65) Poz cement + 8% gel + 2% CACL₂, + 6.25#/sack Gilsonite, .25 lbs/sk Cello Flake @ (2.11 CU/FT) 12.1 ppg , Followed by 80 sacks class "B" cement + 2% CACL₂ + ¼ #/sack cello-flake. @ (1.39 CU/FT) 14.5 ppg.
3. The 4-1/2" production casing will be cemented and tied into the intermediate casing with 600 sacks 65/35 Poz Type III cement + ¼ #/sack CF, 6% gel, 10#/sack CSE + 2% KCL, FL-62 + .2% CD-32, @ (2.06 CU/FT) 12.5 ppg. *100' overlap*

Casing hardware for the production string to include guide shoe, float collar, centralized shoe joint and next five joints. Centralizers across producing zones.

Auxiliary Equipment

A kelly cock will be used with handle available. A full opening safety valve will be used when Kelly is out of string. Rotating head while air drilling. Will have vacuum diversion on blooie line.

5. **DRILLING FLUID PROGRAM**

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Vis</u>	<u>W.L.</u>
0-350'	Spud Mud			N.C.
350-3300'	Fresh Water Gel	8.3-8.6	30-35	N.C
3300'-TD	Air	N.C.	N.C.	N.C.