Form M60-5 November 1983) (Formerly 9-331)	UNITED STATES PEPARTMENT OF THE INTERPRETATION BUREAU OF LAND MANAGE		Expires Aug 5. LEAST DESIGNAT SF 080384	au No. 1004-( . 3 cust 31, 1985 con and serial . 3	
	Y NOTICES AND REPOR a for proposals to drill or to deepen or e "APPLICATION FOR PERMIT—" for		F IF INDIAN, ALLO	TTRE OR TRIBE NAME	
OIL X GAS WELL	7. UNIT AGREEMENT	T NAME			
2. NAME OF OPERATOR  Me	8. FARM OR LEASE Hickman A 9. WELL NO.				
<ol> <li>ADDRESS OF OPERATOR</li> <li>LOCATION OF WELL (Repo See also space 17 below.) At surface</li> </ol>	1R 10. FIELD AND POOL OR WILDCAT Gallegos Gallup				
16	11. SEC., T., B., M., SURVEY OR A	OR BLK. AND			
14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6,080 GL			Sec. 10, 12 COUNTY OR PAR San Juan	T26N, R12W 13. STATE New Mexico	
16.	Check Appropriate Box To Indic	ate Nature of Notice, Report, or C	ther Data		
NOTI	CE OF INTENTION TO:	SUBSEQU	UENT REPORT OF:		
TEST WATER SHUT-OFF  FRACTURE TREAT SHOOT OR ACIDIZE  REPAIR WELL  (Other)  17. DESCRIBE PROPOSED OR CO- proposed work. If we nent to this work.) *	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON* CHANGE PLANS  WPLETED OPERATIONS (Clearly state all per	WATER SHUT-OFF  FRACTUBE TREATMENT SHOOTING ON ACIDIZING  (Other) Completi (Note: Report results Completion or Recotable Completion or Recotable Completion of Recotable Completion and Measured and Crue vertical Control of Completion Completion of Recotable Complet	ALTERIN  ABANDON  On History  of multiple completetion Report and Log  Including estimated	lon on Well form.)	
	Completion history is	relation Gamma-Ray Ligh	GEIVE	D	
	_	on of New Mexico Oil	PR 0.7 1988 CON. DIV DIST. 3	<b>J</b> .	
		ACCEPTED FOR RECORD	ADEXSTO Marica	88 M 88 M 88 M 88	
		APR 4 1988	07 KG 08 W		
		FARMINGTON RESOURCE AREA BY	URUZ AREA Z NEXICO	VED VED VED VED	
SIGNED T. Gre	foregoing is true and correct  WWW TITLE  Merrion	Production Engineer	DATE	3/31/88	
(This space for Federal APPROVED BY CONDITIONS OF APPR	TITLE		DATE		

\*See Instructions on Reverse Side

## Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Fereral and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult locus State or Federal office for specific instructions.

In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between annabove plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well situenditioned for final inspection looking to approval of the abandonment. Item 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State office.

# PRIVACY ACT

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be funished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160. PRINCIPAL PURPOSE: The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal er Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations. (2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2/2). (3) Analyze future applications to drill or modity operations in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION. Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160

#### HICKMAN A NO. 1R

#### COMPLETION

#### 3/01/88 Day No. 1

MIRU RAM Service Co. Pulled 4-1/2" casing from slips and ran 1" IJ tubing with muleshoe cut on the end to tag cement top @ 1,372' KB. SDON. (CCM)

#### 3/02/88 Day No. 2

Tubing set @ 1,360' KB. Rigged up Western Co. Cementers pumped 5 bbls down tubing and got circulation between 4-1/2" casing and 7-7/8" open hole. Started cementing. After pumping 58 bbls of slurry, lost circulation and fluid dropped on backside. Continued pumping, moving 1" tubing up and down, never regained circulation. Total cement pumped was 225 sx Class 'B' plus 2% chemical extender and 4% WR-10 (retarder) @ 12.5#/gal. 2.06 cu.ft./sk. Total bbls - 82.62 slurry. Average rate 1 bpm. Average pressure - 750 psi. Ending pressure - 975 psi. Flushed tubing with 1/2 bbl water. Rigged down Western Co. TOH laying down 1" tubing string. Pulled 15,000 lbs. on 4-1/2" casing. SDON. (CCM)

#### 3/03/88 Day No. 3

Ran 1" tbg. to tag cement @ 282' KB. Laid down 1" tbg. Ronnie Snow with BLM witnessed tag and said no further remedial cement job was required. Removed surface csg. head. Welder cut off 4-1/2" casing and bell nipple. Installed longer piece of 4-1/2" casing from yard. Reinstalled csg. head. Set csg. in slips. Nippled up BOP. PU 3-7/8" bit and csg. scraper on 2-3/8" EUE tbg. Tagged stage tool. Pressure tested to 3000# psi, held good. Drilled out stage tool @ 4,146' KB. Ran in the hole to tag botton @ 5,235' KB. Pressure tested csg. to 4000# psi. Shut well in. SDON. (CCM)

#### 3/04/88 Day No. 4

Shut down. Waiting on cement. (CCM)

#### COMPLETION

HICKMAN A NO. 1R

#### 3/05/88 Day No. 5

Pulled tbg. to 5,196' KB. Western rolled the hole with 10 Bbls gellplug. Loaded hole with frac water. Spotted 250 gal. 15% HCl with 1 gal/1000 aquaflow. TOH with 2-3/8" EUE tbg., csg. scraper, and 3-7/8" bit. Rigged up perforators. Ran gamma-ray collar log from 5,227' KB to 3,500 KB. Perforated Gallup in 1 run with select fire per induction log as follows:

5010', 5012', 5015', 5036', 5044;, 5122', 5125', 5131',

5133', 5140', 5142', 5147', 5150', 5156', 5158', 5174',

5181', 5184', 5187' KB. Total 19 holes, 0.34" diameter.

MOGG TEVE WIE

#### HICKMAN A NO. 1R

#### 3/05/88 (cont'd)

Rigged up Western Co. to ball off perfs as follows: pumped 500 gal 15% HCl, dropped 30 balls, balled off to 4,000 psi. Flowed well back. Rigged up Petro wireline and ran junk basket to recover ball sealers. Got 30 ball sealers back with 18 hits.

Rigged up Western Co., to frac Gallup formation with 75 quality foam 1 gal/1000 aquaflow as follows:

15,000	gal.	Foam pad	10,000	gal.	2.5#/gal sand
5,000	gal.	1#/gal. sand	10,000	gal.	3#/gal sand
5,000	gal.	1.5#/gal. sand	7,000	gal.	3.5#/gal sand
5,000	gal.	2#/gal. sand			

Total avg. rate: 30 BPM ISDP: 2,200 psi
Total water: 359 Bbls Total sand: 102,000 lbs. 20/40
Avg. Pressure: 2,650 psi Total N-2: 864,000 SCF

Shut well in 2 hours. 1,300 psi FSIP. Rigged up flowback manifold and 2" line to reserve pit. Opened to pit through 3/8" positive flow choke for 1.5 hrs. Started making show of oil. Put flow to frac tank overnight. Flowing @ 600 psi. SDOWE. (CCM)

#### 3/06/88 Day No. 6

Well flowing overnight made 90 Bbls fluid in 14 hours. Shut well in. Leak in flowline. Had roustabouts repair flowline and clean up small oil mess. Well shut-in overnight. (CCM)

#### 3/07/88 Day No. 7

Well shut-in overnight. 450 psi. Opened to frac tank through 3/4" adjustable flow choke. Started making some fluid with 50 psi csg. Set choke on 32/64 left flowing overnight. Made 6.5 Bbls to tank. Dead this a.m. (CCM)

#### 3/08/88 Day No. 8

Tagged sand at 5,050' with wireline depthometer. Wind blowing too hard to run blocks through derrick. SDON. (CCM)

#### 3/09/88 Day No. 9

TIH with 2-3/8" hydrostatic bailer on 2-3/8" EUE tubing. Tagged sand @ 5050' KB. Cleaned out 120' to 5170' KB. Bailer quit bailing. TOH with bailer. Cleaned out sand and re-ran same bailer. Finished cleanout to PBTD. TOH with bailer. TIH with production string as follows:

Mud anchor	21.92'
Perf. sub	3.20'
Seating nipple	1.15'
153 jts. tbg.	4969.61'
К.В.	11.00'

5006.88' bottom of mud anchor

Landed tbg. Nippled down BOPs. Nippled up wellhead. Made two swab runs by-passing separator to production tank. Fluid level: 3000' KB. Recovered 10 Bbls oil. CP - 50 psi. Shut well in. SDON. (CCM)

#### HICKMAN A NO. 1R

#### 3/10/88 Day No. 10

Tbg. dead. CP - 150 psi. Made 4 swab runs. Fluid level: 3,000' KB. Swab 25 Bbls. Tbg. started flowing. Made 13 Bbls/hr for 3 hours. CP - 280 psi. at 1:00 p.m. Left flowing. SDON. 25 Bbls fluid swabbed today. 39 Bbls flowed in 3 hours. Total fluid - 64 Bbls. (CCM)

#### 3/11/88 Day No. 11

Tbg. - 0 psi. CP - 225 psi. Well flowing to production tank, by-passing separator. Producing gas with heavy mist of oil. No gas rates measured. Made 70 Bbls fluid in 20 hours. Move RAM rig off location. (TM)

#### 3/12/88 Day No. 12

Produced 48 Bbls of total fluid in 28 hours flowing. Tbg - 0 psi/csg - 250 psi. Well gassing lightly. Shut-in well for BHP buildup. (SSD)

3/13/88 Day No. 13
Shut-in for BHP buildup. (SSD)

3/14/88 Day No. 14
Shut-in for BHP buildup. (SSD)

3/15/88 Day No. 15
Shut-in for BHP buildup. (SSD)

PLM VAIL ROOM
88 IPP - 1 PM I2: NO
MARKETON RESOURCES ARE

### HICKMAN A NO. 1R BECEIVED

March 16, 1988

Shut-in for BHP buildup. (CCM)

86 APP - 1 PM 12: 4:0

March 17, 1988 Day No. 17

Shut-in for BHP buildup. (CCM)

March 18, 1988

MIRU B & R wireline. Measured SIP @ 519 psig. Run in hole with pressure bomb. Measured wellbore gradient. BHP = 603 psig @ 4,970' KB. POH. Rig down. Move off. (SSD)

March 19-21, 1988

Shut-in. (SSD)

March 22, 1988 Day No. 22

Shut-in. (SSD)

March 23, 1988

SIP - 519 psig/519 psig. Opened well. Put on test through separator. Produced 19 hours. Filled separator and made 1-1/2 Bbls oil to tank. Logged off. Tubing 80 psi/casing 512 psi. (TM)

March 24, 1988

Produced 68 Bbls total fluid to tank in 24 hours. Removed plug from water drain line on separator to pit. Opened casing in preparation for running rods. TP/CP - 80/400. Drained 105 total Bbls H2O from tank since production commenced. Total stocks presently 162 Bbls. (TLM)

March 25, 1988

Produced 0 Bbls oil, 0 Bbls H2O, and 0 MCF. TP/CP - 0/0. Tubing and casing blown down in preparation for running rods. (TLM)

March 26-28, 1988

Waiting on pumping installation. (CCM)

March 29, 1988

MIRU RAM Service Co. Rig BOPs. Tag sand - 22' above B.P. TOH with tubing. Install hydrostatic bailer. TIH with tubing. Bail 70 ft. sand. TOH with tubing and sand bailer. SDON. (Fizz)

March 30, 1988

TIH with tubing. Add 6 jts - 194.94'. Total 5164.55' in hole. Run new pump and rods as follows: 2" x 1-1/4" x 6' x 8' x 11' RHAC Axelson pump; 40 3/4" plain; 68 5/8" plain; 29 5/8" Patco; 68 3/4" Patco; one 10', one 6', and two 2' 3/4" ponies; 22' polish rod; and 8' liner. Rig down. SDON. (Fizz)

March 31, 1988

Shut-in. (CCM)