

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

WELL API NO. 30-025-11864
Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
State Oil & Gas Lease No. B-229-1
Lease Name or Unit Agreement Name Arnett Ramsay (NCT-B)
Well No. 1
Pool name or Wildcat Jalmat (T-Y-7R)

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER
Name of Operator Doyle Hartman
Address of Operator P.O. Box 10426; Midland, Tx 79701
Well Location Unit Letter <u>M</u> : <u>990</u> Feet From The <u>South</u> Line and <u>330</u> Feet From The <u>West</u> Line 32 Section 25 Township 37 Range NMPM Lea County
Elevation (Show whether DF, RKB, RT, GR, etc.) 2984' DF (2979' G.L.)

11

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
Replacement
CASING TEST AND CEMENT JOB ☒
OTHER: Return to beneficial use ☒

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

For Details of Completed Operations, please refer to page 2 of 5, 3 of 5, 4 of 5 and 5 of 5 attached hereto, and made a part hereof.

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

SIGNATURE Steve Hartman TITLE Engineer DATE 10-25-01
TYPE OR PRINT NAME Steve Hartman TELEPHONE NO. 915-684-4011

(This space for State Use)

ORIGINAL SIGNED BY
PAUL F. KAUTZ
PETROLEUM ENGINEER

APPROVED BY _____ DATE JUN 21 2002

CONDITIONS OF APPROVAL, IF ANY:

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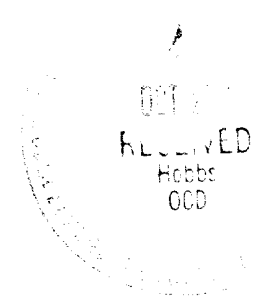
NMOCD Form C-103 dated 10-25-01

Doyle Hartman

Arnott Ramsay NCT-B No. 1

M-32-25S-37E

API Number 30-025-11864



Details of Completed Operations

In accordance with the NMOCD's notice of 5-25-01, and our written reply of 5-30-01, moved in and rigged up well service unit, on 8-20-01.

Pulled and laid down old 2 7/8" O.D., 10V, EUE tubing and 5 1/2" Sweet Hookwall packer.

Ran new 2 3/8" O.D. tubing and 182.91' bottom-hole cleanout assembly, consisting of 4 3/4" bit and (6) 3 1/2" O.D. drill collars, to top of fill, at 2848' RKB. Hooked up air units. Cleaned out wellbore, to top of cement retainer, at 3007'.

Pulled 182.91' bottom-hole cleanout assembly. Loaded lower portion of wellbore with 2% KCL water.

Rigged up Schlumberger. Logged well with DS-CNL-GR-CCL log and VDCBL-GR-CCL log. Found top of original 5/22/35 100-sx cement job, at 2610' RKB.

Ran 2 3/8" O.D. tubing, 5 1/2" Model "C" packer, and 5 1/2" model "C" RBP. Performed casing integrity test. Found holes in 5 1/2" O.D. casing, between 1269' and 2471'. Pressure tested 5 1/2" O.D. casing, from 2471' to 2805', to 600 psi. Pressure held okay.

Laid down 2 3/8" O.D. tubing and 3 1/2" O.D. drill collars. Temporarily moved off well service unit.

Moved in backhoe. Dug out around wellhead. Installed new 7 5/8" O.D. x 8.3' tieback joint. Installed new 2" casing riser back to surface. Wrapped all exposed piping, with corrosion-resistant tape. Installed 54" O.D. x 9' corrugated steel cellar can. Backfilled around cellar can.

Moved well service unit back onto well. Hooked up air units. Unloaded water from wellbore. Covered existing Jalmat (Yates) perfs, from 2815' to 3004', with 40 sx of frac sand. Ran 2 3/8" O.D. tubing. Tagged top of frac sand, at 2804'.

Rigged up wireline truck. Ran free-point. Backed off 5 1/2" O.D. casing, at 2558', with collar looking up. Pulled and laid down 83 jts of old 5 1/2" O.D., 17 lb/ft, 10V casing.

Ran 7 5/8" casing scraper, to top of 5 1/2" O.D. casing collar, at 2558'. Pulled casing scraper.

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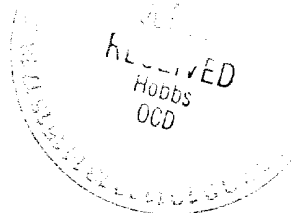
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Rigged up casing crew. Ran 63 jts of new 5 1/2" O.D., 15.5 lb/ft, K-55, ST&C casing equipped with 5 1/2" 10V-to-8Rd changeover, Weatherford 5 1/2" D.V. Tool, and (7) 7 5/8" x 5 1/2" centralizers. Screwed 5 1/2" changeover into casing collar, at 2558'. Prior to running 5 1/2" D.V. Tool, placed 5 1/2" D.V. Tool in open position, for pressure equalization, below 5 1/2" D.V. Tool, while cementing.

Rigged up Halliburton. Cemented 5 1/2" O.D. casing, with 800 sx of API Class "C" Neat cement, followed by 120 sx of API Class "C" cement, containing 2% CaCl₂, 3 lb/sx Gilsonite, and 0.25 lb/sx Flocele. Circulated cement to surface, on outside of both 5 1/2" O.D. casing and 7 5/8" O.D. casing strings. Filled 54" O.D. x 9' corrugated cellar can, with excess cement. Plug down at 7:00 p.m., CDT, 8-31-01. Left 1000 psi on inside of 5 1/2" O.D. casing.

Tied pump truck onto 10 3/4" O.D. surface casing. Squeeze cemented down 10 3/4" O.D. surface casing, with an additional 275 sx of cement, consisting of 75 sx of API Class "C" Neat cement, followed by 200 sx of API Class "C" cement, containing 2% CaCl₂, 3 lb/sx Gilsonite, and 0.25 lb/sx Flocele. Released pressure on inside of 5 1/2" O.D. production casing, upon completion of squeeze process.

WOC until 9-4-01. Installed B & M Oil Tool 5 1/2" x 2 3/8" x 3 1/2" 3000-psi Type MR tubinghead. Installed BOP.

Ran 182.91' bottom-hole drilling and cleanout assembly. Drilled out 5 1/2" D.V. Tool. Circulated out frac sand, to 2800'.

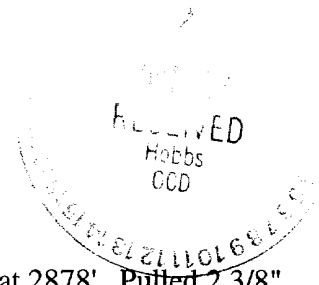
Hooked up air unit. Unloaded water from 5 1/2" O.D. casing. Using air, cleaned out remainder of frac sand, from 2800' to 3007'. Pulled bottom-hole drilling and cleanout assembly.

Rigged up wireline truck. Select-fire perforated Jalmat (Yates), with an additional 27 shots, with one 0.38" hole, at the following points:.

2764	2783	2810	2829	2850	2866
2767	2787	2813	2835	2853	2869
2774	2790	2817	2838	2856	
2777	2793	2821	2844	2859	
2780	2799	2825	2847	2863	

Poured 17 sx of frac sand down 5 1/2" O.D. casing. Waited one hour for frac sand to fall to

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Doyle Hartman
Arnott Ramsay NCT-B No. 1
M-32-25S-37E
API Number 30-025-11864



bottom. Ran open-ended 2 3/8" O.D. tubing. Tagged top of frac sand, at 2878'. Pulled 2 3/8" O.D. tubing.

Ran 2 3/8" O.D. tubing, 5 1/2" Model "C" packer, and 5 1/2" Model "C" RBP. Acidized new perms, in two stages, with a total of 6500 gal of 15% NEFE acid.

Interval (ft.)	Acid Volume (Gal)	Ball Sealers	Avg Rate (BPM)	Avg Pressure (psig)	Max Pressure (psig)	ISIP (psig)
2764-2799	2500	13	5.9	2357	3029	0
2810-2869	4000	126	6.1	1105	1630	0

Pulled 5 1/2" Model "C" packer and 5 1/2" Model "C" RBP.

Ran open-ended 2 3/8" O.D. tubing. Tagged frac sand, at 2878'. Hooked up air unit. Cleaned out frac sand, to 3007'. Raised and landed bottom of 2 3/8" O.D. tubing, at 2968' RKB (91 jts @ 32.38'/jt + 1.1' SN + 18' MA - 3' AGL + 5' KBC = 2967.7').

Ran 2" x 1 1/4" x 12' RHAC insert pump and 3/4" rod string, consisting of (117) 3/4" x 25' Axelson S-87 API Class "KD" rods, (1) 3/4" x 6' rod sub, (2) 3/4" x 2' rod subs, 1 1/4" x 16' polish rod. Started pumping and cleaning up load, at 6:00 p.m., CDT, 9-06-01, at 6.5 x 64 x 1 1/4".

Tested well as follows:

Date:		10-8-01
Gas	=	5 MCFPD
Water	=	0 BWPD
Orifice size	=	0.125"
CP	=	7.4 psig
OP	=	7.4 psig

Moved in and rigged up well service unit, on 10-22-01. Pulled rods and tubing.

Poured 15 sx of frac sand down 5 1/2" O.D. casing, to cover lower perms. Ran 2 3/8" O.D. tubing. Tagged top of frac sand, at 2906'.

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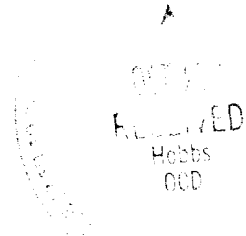
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Raised bottom of 2 3/8" O.D. tubing, to 2794' RKB (84 jts @ 32.38'/jt + 1.1' SN + 18' MA + 2' CBJ - 3' AGL + 5' KBC = 2744.02'). Installed 3 1/2" heavy-duty frac valves, on 5 1/2" O.D. casing. Made up flowing wellhead assembly.

Rigged up Halliburton. Performed CO₂ foam frac, down casing-tubing annulus, with 82,300 gal of gelled water, 94,500 gal of CO₂, and a combined total of 400,000 gal of 20/40, 10/20, and 8/16 frac sand, at an average treating rate of 43.1 BPM, and average wellhead casing pressure of 2482 psig. Static dead-string pressure = 1112 psig.

Left well shut in for one hour. Cleaned up well overnight, to blowdown tank.

Killed well. Removed frac valves. Installed 3" 1500-psi production ball valves.

Lowered 2 3/8" O.D. tubing. Tagged top of frac sand, at 2839' RKB.

Hooked up air units. Cleaned out frac sand, to 3007'. Raised and landed bottom of 2 3/8" O.D. tubing, at 2968' RKB (91 jts @ 32.38'/jt + 1.1' SN + 18' MA - 3' AGL + 5' KBC = 2967.7').

Ran 2" x 1 1/4" x 12' RHAC insert pump and 3/4" rod string, consisting of (117) 3/4" x 25' Axelson S-87 API Class "KD" rods, (1) 3/4" x 6' rod sub, (2) 3/4" x 2' rod subs, 1 1/4" x 16' polish rod. Started pumping well, at 5:00 p.m., 10-24-01, at 6.5 x 64 x 1 1/4".

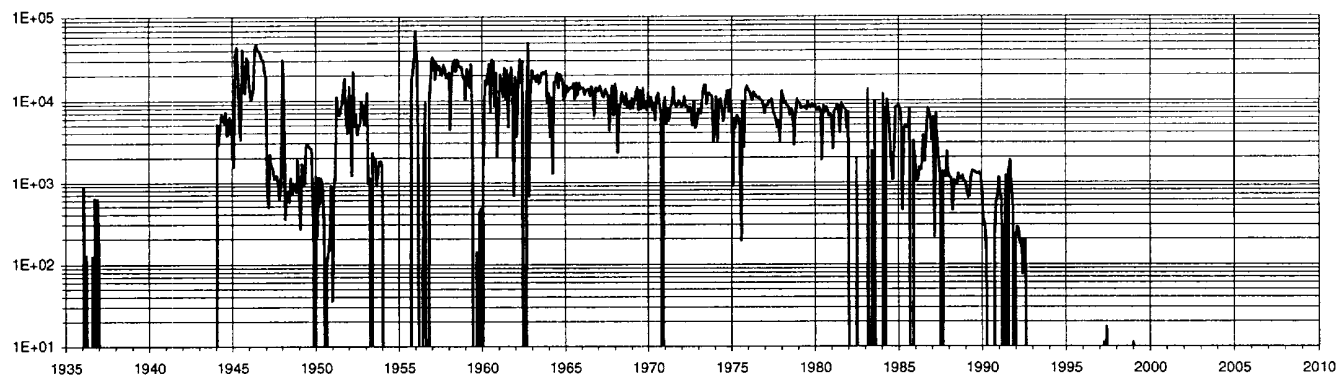
Tested well as follows:

Date:		10-25-01
Test Period:		15 hrs
Gas Rate	=	164 MCFPD
Water Prod	=	19.98 bbls (15 hrs)
Water Rate	=	32 BPD
Orifice Size	=	0.375"
Casing Pressure	=	50.5 psig
Orifice Pressure	=	50.5 psig

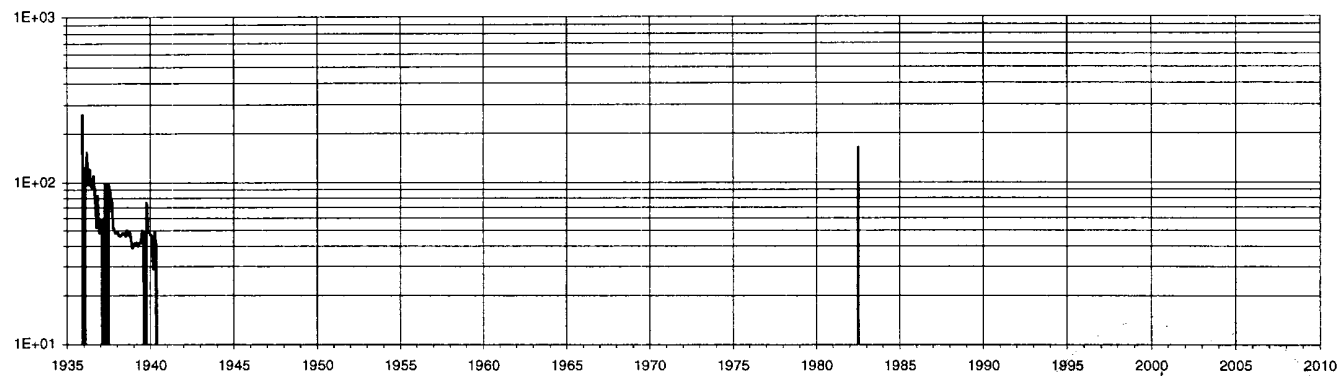
In accordance with NMOCD notice of 5-25-01, well has now been successfully returned to beneficial use.

ARNOTT RAMSAY NCT B #1
JALMAT (TANSILL YATES SEVEN RIVERS)YS
32M 25S 37E
HARTMAN DOYLE

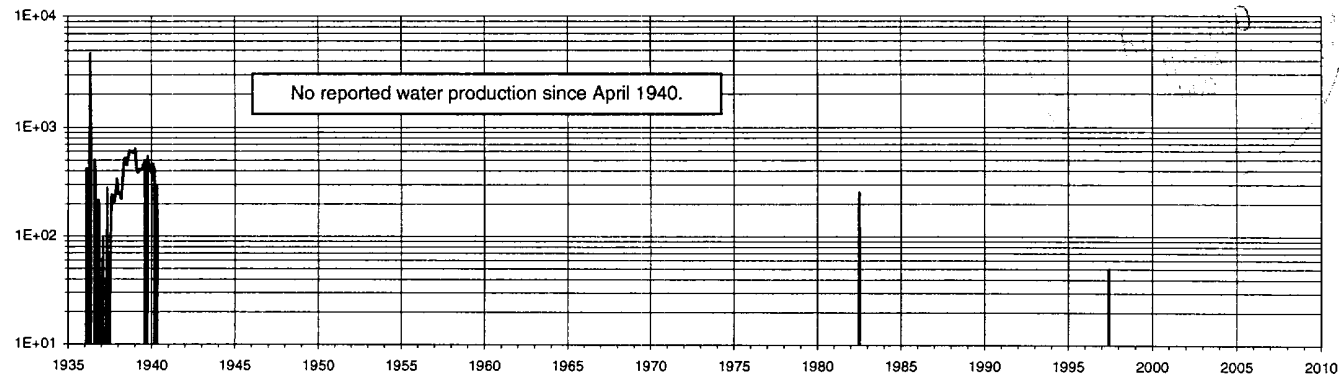
Gas Production (MCFPM)



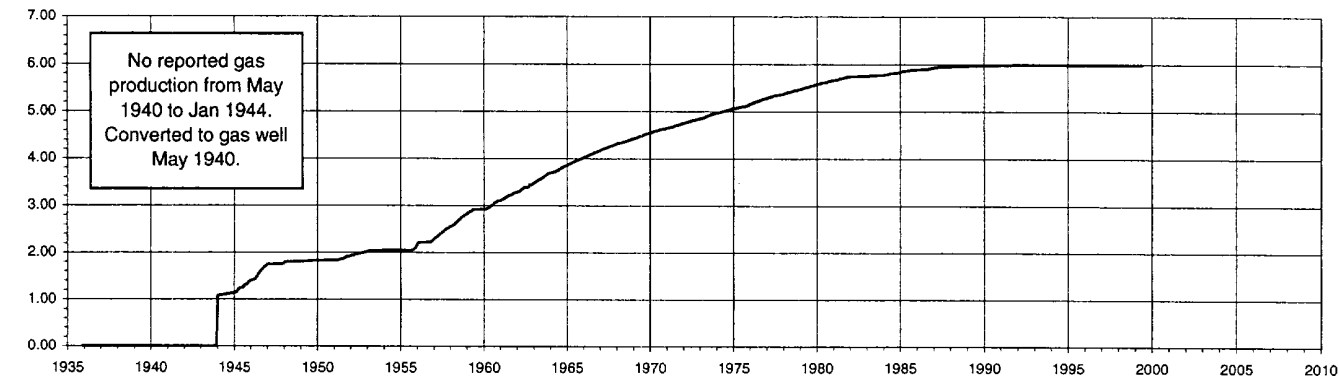
Oil Production (BPM)



Water Production (BPM)



Cumulative Gas Production (BCF)



WHSIP (psia)

