

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

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

WELL API NO.
30-025-22317

Indicate Type of Lease
STATE ☒ FEE ☐

State Oil & Gas Lease No.
X0647-394 (formerly Lease No. 647)

Lease Name or Unit Agreement Name
State "BV"

Well No.
1

Pool name or Wildcat
South Empire Morrow

Well Location
Unit Letter J : 1800 Feet From The South Line and 1980 Feet From The East Line
Section 25 Township 17S Range 28E NMPM Eddy County

Elevation (Show whether DF, RKB, RT, GR, etc.)
3700.5' RKB (3683.5' GL)

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 ☐ GAS WELL ☒ OTHER

Name of Operator
Doyle Hartman

Address of Operator
500 N. Main St., Midland, Texas 79701

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input checked="" type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ANBANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: Run 5 1/2" tieback liner, add perms, and stimulate <input checked="" type="checkbox"/>	Notice of threatened meter disconnection <input checked="" type="checkbox"/>

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 pages 2 of 4, 3 of 4 and 4 of 4 enclosed herewith.

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

SIGNATURE Tricia Barnes TITLE Production Analyst DATE 02-12-01

TYPE OR PRINT NAME Tricia Barnes TELEPHONE NO. 915-684-4011

(This space for State Use)

APPROVED BY For Record Only TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APR 10 2001

DETAILS OF COMPLETED OPERATIONS

Moved in and rigged up well service unit. Ran and set Model "F" profile nipple, at 10,645'. Unlatched "on-off" tool. Pulled and inspected 2 3/8" O.D., N-80 tubing.

Ran into hole with 2 3/8" O.D. tubing equipped with "on-off" tool. Hooked up air units. While running tubing, unloaded packer fluid from hole. Engaged "on-off" tool. Released Baker 4 1/2" Lok-Set packer. Pulled 4 1/2" Lok-Set packer and original 122.9' Vann Tool Company perforating - production assembly.

Rigged up Schlumberger. Logged lower part of wellbore, with DAS-CNL-GR-CCL log. Set RBP at 10,642' RKB. Loaded hole with 356 bbls of 2% KCl water. Finished logging well with DAS-CNL-GR-CCL log, from 7500' to 10,642. Logged well, from 6562' to 9600', and 0' to 3000', with USI-GR-CCL log.

Rigged up casing crew. Ran 5 1/2" O.D. tieback liner, configured as follows:

(1) 5" O.D., 18 lb/ft x 7 5/8" O.D. TIW Type LG	
Chevron Seal Nipple	3.00'
2 jts of 5 1/2" O.D., 17 lb/ft, N-80 csg.	85.56'
(1) 5 1/2" O.D., 17 lb/ft, N-80 orifice collar	1.21'
108 jts of 5 1/2" O.D., 17 lb/ft, N-80 csg.	4863.45'
<u>35 jts of 5 1/2" O.D., 17 lb/ft, P-110 csg.</u>	<u>1620.65'</u>
Total Tally	6573.87'

Stung into 5" O.D. TIW Type LG Receptacle, at 6562'. Rigged up Halliburton. Cemented 5 1/2" O.D. tieback liner, with 625 sx of API Class-C cement containing 0.5% Halad 322, at a cementing rate of 5 BPM. Circulated 128 sx of good-quality cement to pit. Plug down at 5:00 P.M., CST, November 22, 2000.

Installed Cameron 5 1/2" x 2 7/8" x 3 1/16" 10,000-psi working-pressure tubinghead. Tested tubinghead, and 5 1/2" O.D. tie-back liner, from 0' to 6391', to a wellhead pressure of 7500 psi. Pressure held okay.

Tied pump truck onto 10 3/4" O.D. x 7 5/8" O.D. casing annulus. Confirmed that 7 5/8" O.D. intermediate-string cement job, was tied into bottom of 10 3/4" O.D. surface casing, by attempting to pump down 10 3/4" x 7 5/8" annulus, at a pump-in pressure of 2000 psi. Could not pump down 10 3/4" O.D. x 7 5/8" O.D. casing annulus, at a pump-in pressure of 2000 psi.

Drilled out cement inside of 5 1/2" O.D. tieback liner. Pressure tested wellbore, from 0' to 10,642', to a wellhead pressure of 3500 psi. Ran into hole with 2 3/8" O.D., N-80 tubing and retrieving head. Hooked up air units. While running 2 3/8" O.D. tubing, unloaded 2% KCl water from wellbore. Unlatched and pulled RBP.

Ran 198.96' Schlumberger tubing-conveyed perforating gun. Perforated existing completion interval, as follows, with an additional 34 (0.45") deep-penetrating shots:

10,670 - 10,688'	(10 holes)
10,726 - 10,736'	(6 holes)
<u>10,748 - 10,782'</u>	<u>(18 holes)</u>
10,670 - 10,782'	(34 holes)

Rigged up Halliburton. Spotted acid across and above perms, from 10,670' to 10,782' (110 holes), by pumping 400 gal of 10% Clay Safe-5 acid containing 25% methonal, 5% Musol-A solvent, 0.2% SSO-21M surfactant, 0.2% Superflo III surfactant, 0.5% Cla-Sta XP clay stabilizer, 0.375 lb/gal Clafix clay control, and 0.05 lb/gal Ferchek - A iron control. Allowed acid to fall and equalize.

Raised and set packer, at 10,501'. Acidized well with an additional 6900 gal of 10% Clay Safe-5 acid solution, 16,587 gal of liquid CO₂, and 123 ball sealers, at an average treating rate of 5.6 BPM and average wellhead treating pressure of 2436 psi. Flushed with 15.16 bbls of 70 - quality foam consisting of 7% KCl water and liquid CO₂.

ISIP	=	500 psi
5 - min SIP	=	236 psi
10-min SIP	=	230 psi
15-min SIP	=	203 psi

Flow tested well.

Rigged up Halliburton. Performed CO₂ foam frac down casing - tubing annulus, with 247,784 gal of foam and 155,000 lbs of 20/40 and 16/20 high-strength proppant, at an average frac rate of 41.38 BPM (max rate = 47.70 BPM) and average wellhead casing pressure of 6632 psi (max pressure = 7206 psi).

ISIP	=	1820 psi
5-min SIP	=	1151 psi
10-min SIP	=	993 psi
15-min SIP	=	860 psi

During frac, average static wellhead tubing pressure = 1576 psi.

Lowered tubing. Tagged top of high-strength frac proppant, at 10,755'. Hooked up air units. Cleaned out frac proppant, to 10,851' RKB.

Tied well into sales line. Began testing well.

On 1-1-01, Duke Energy Field Services temporarily locked closed State "BV" No. 1 meter run, due to an alleged oxygen content of 34,000 ppm. From 1-02-01 until 1-16-01, produced well to atmosphere, to clean up well stream, and lower alleged high oxygen content.

Subsequently, on 1-16-01, Duke measured well-stream oxygen content, at a substantially reduced level of 900 ppm. On 1-17-01, Duke unlocked State "BV" No. 1 meter run, and again allowed well to be produced into its Artesia gas gathering system.

On 1-24-01, contrary to non-discrimination provisions of 70-2-19, NMSA 1978, and NMOCD's No-Flare Rule, Duke issued a certified notice, that the State "BV" No. 1 well (**State of New Mexico Lease No. X0647-394**) would be disconnected (effective 3-1-01), from Duke's Artesia gathering system (that serves South Empire Morrow Pool), due to an alleged (but unsubstantiated) "increased oxygen content" in State "BV" No. 1 well stream.

On 2-6-01, Mobile Analytical Laboratories, of Odessa, Texas, measured oxygen content of State "BV" No. 1 well stream at 10 ppm (0.00001 gas fraction, or a daily oxygen rate of 0.005 MCFPD), substantiating that State "BV" No. 1 well is not (and cannot be) source of Duke's alleged high-oxygen problem, at Duke's Artesia plant. As of this date, and notwithstanding our just-completed \$825,000 workover, Duke has not withdrawn its threat to disconnect (remove) our State "BV" No. 1 gas meter, effective 3-1-01.

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

WELL API NO. 30-015-22317
Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
State Oil & Gas Lease No. 647
Lease Name or Unit Agreement Name State "BV"
Well No. 1
Pool name or Wildcat Empire South Morrow

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 ☐ GAS WELL ☒ OTHER

Name of Operator
Doyle Hartman

Address of Operator
P. O. Box 10426, Midland, Texas 79702, (915) 684-4011

Well Location
Unit Letter J : 1800 Feet From The South Line and 1980 Feet From The East Line
Section 25 Township 17S Range 28E NMPM Eddy County

Elevation (Show whether DF, RKB, RT, GR, etc.)
3700.5' RKB (3683.5' GL)

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: Protect casing across uncemented waterflow zone ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ANBANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: ☐

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.

Move in well service unit. Set plug in Model "F" seating nipple. Unlatch Model "FL" on-off tool and pull out of hole with 2 3/8" O.D., 4.7 lb/ft, N-80 tubing. Drop frac sand to protect blanking plug and on-off tool. Trip into and out of hole with 4 1/2" casing scraper. Run into hole with Model "C" RBP. Set RBP at 9500'. Drop frac sand to protect RBP. Run into hole with the Model "C" packer and set at 6700'. Test integrity of 4 1/2" O.D. casing across poorly-bonded sections between 6800' and 8450'. If casing tests okay, run tapered mill and dress 5" tie-back sleeve at 6562'. Run 5" tie-back nipple and 6560' of 5 1/2" O.D., 17 lb/ft, N-80 casing to cover and protect presently uncemented section of 7 5/8" O.D. casing opposite waterflow interval at 1970'. Cement tie-back string from 0' - 6562'. In the event of waterflow while performing above described work, build and plastic line necessary holding pits (for containment of water) until waterflow has been properly isolated. After 5 1/2" O.D. tie-back liner has been landed and cemented into place, proceed with returning well to production.

The necessary work will be commenced, on or about October 22, 1999, promptly after election (to participate or assign interest) and payment of cost or assignment of interest has been made by each working interest owner.

** PERFORM AT TUC ON 7 5/8" AND CIRC TO SURFACE.*

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 10-05-99

TYPE OR PRINT NAME Steve Hartman

TELEPHONE NO. 915-684-4011

(This space for State Use)

SUPERVISOR, DISTRICT II

APPROVED BY

TITLE

DATE

11-22-99

CONDITIONS OF APPROVAL, IF ANY:

Phone
522-1206 Area 303

LYNES, INC.

Box 712
Sterling, Colo.

Owner Atlantic Richfield Co.
Box 1710
Address Hobbs, New Mexico 88240

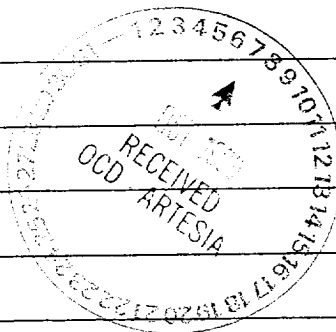
Lease and Well No.
Field
State B.V. Comm. #1
Empire Abo

Date 4-22-78
Ticket No. 12042

LOCATION --
Purpose for ECP To shut off water flow.

Size and Type of ECP 7 5/8" 39# R.T.S. D-110 Steel
Casing Run Through: Size 10 3/4" Weight 40.5# Set At 880'
Open Hole Size: Drilled 9 1/2" Calipered --
Casing ECP Run On: Size 7 5/8" Weight 26# 29# Grade N-80
Maximum Pressure Allowed on Casing (psi) 3000
ECP Setting Depths: 1. 1750' 2. -- 3. --
Inflation Pressure: -- -- --
Temp. at Setting Depth: -- -- --
Back Pressure Valve Setting: 1600 -- --
Pressure at which Valves Opened: -- -- --
Type of Fluid ECP Set With Fresh water Wt./Gal. 8.34
Type of Fluid in Hole Brine water Wt./Gal. 8.5
Cement Program: No. of Sacks -- Cu. Ft. -- Wt./Gal. --
1st Stage 100 Class H -- --
2nd Stage 850 B.J. Lite -- --
3rd Stage 100 Class C -- --
Displacing Fluid Fresh water Wt./Gal. 8.34
Estimated Top of Cement 1700 Max. Diff. Pressure --
Casing Pressure just Prior to Bumping Top Plug --
Did Tool Function Properly? Yes

REMARKS:
Did not shut off water zone.

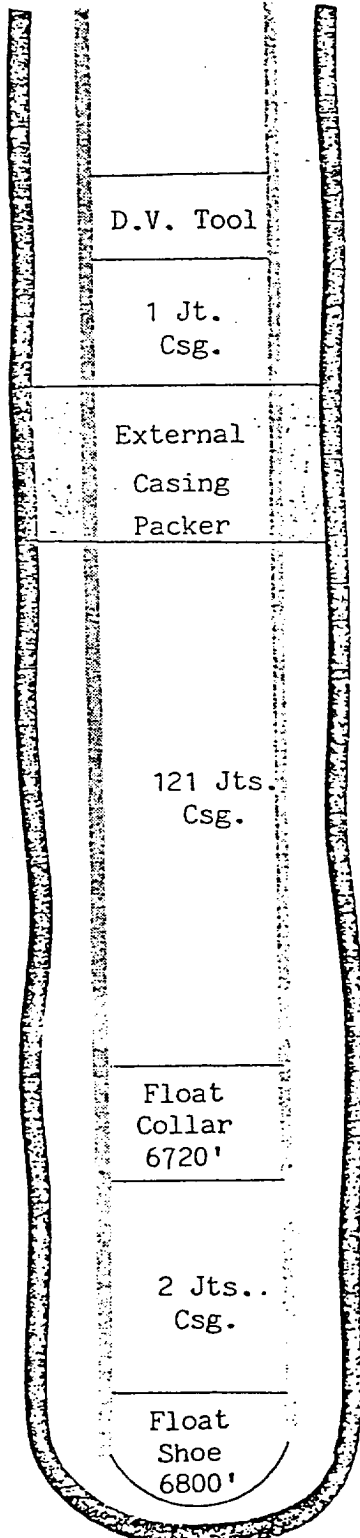


CEMENTING CO.: B.J. Hughes

Lynes Dist.: Hobbs, New Mexico

Lynes Representative: Dale Fain

Owners Representative: Butch Arning



WELLBORE DIAGRAM

OPERATOR: DOYLE HARTMAN (formerly ARCO)
WELL: STATE "BV" No. 1
FIELD: EMPIRE SOUTH (Morrow)

PREP. DATE: 9-23-99

SPUD DATE: 4-6-78

COMP. DATE: 6-15-78

Location

UNIT: J
SECTION: 25
TWP: 17S
RNG: 28E
CO.: EDDY
STATE: NM
DF: 3,700'
GL: 3,682'

DRILLING HISTORY

Spudded well 4-6-78.

Encountered waterflow @ 1,970', 2 - 3 BPM.

Set 7-5/8" O.D. csg @ 6,805', w/Lynes ECP @ 1,747'.
DV Tool @ 1,697'. Cemented w/1,450 sx (2 stages).
Stage 1 - 1,050 sx, plug did not bump, Lynes ECP
did not hold waterflow. Stage 2 - 400 sx thixotropic
(circ 35 sx).

Lost returns @ 9,175' - 9,208'.

Drilled 6-3/4" hole to 10,860' (loggers depth
@ 10,850').

Set 4-1/2" liner at 6,562' - 10,860'. Cemented w/850 sx.
Plug prematurely bumped while cementing liner.
TOC inside of liner @ 9,929'. Ran a TIW 5" Type LG
Receptacle on top of liner.

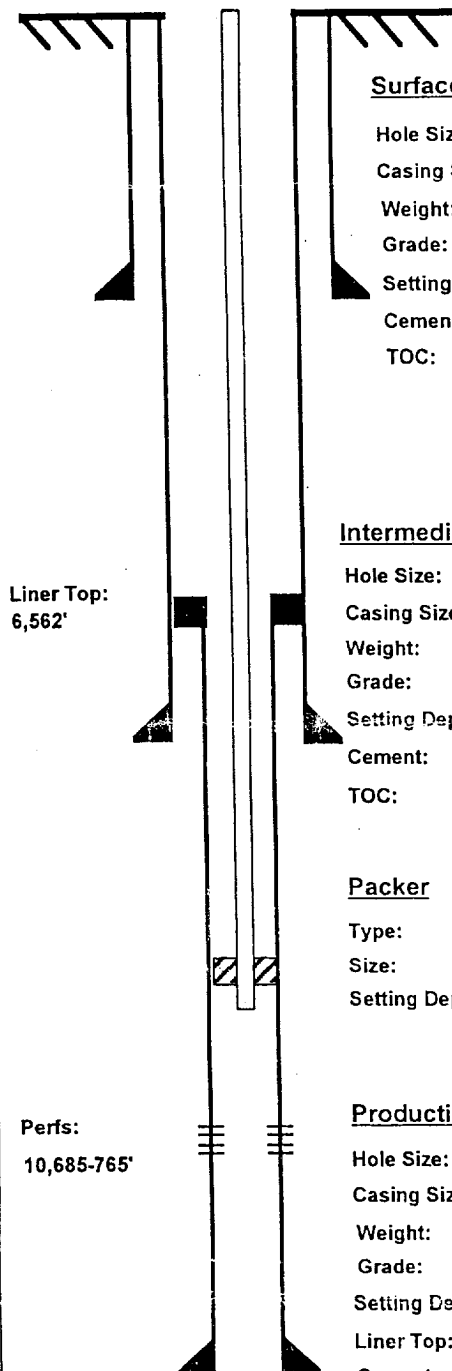
Drilled out cement to 6,562'. Tested 7-5/8" csg to
3,000 # for 1 hr., no leaks (6-6-78).

Drilled out cement to 10,850' drillers depth (loggers
depth @ 10,844').

Ran GR-CBL from 6,400' - 10,844'. Poor bond 6,571'
- 6,956', good bond 6,956' - 7,116', poor bond 7,116'
- 7,266'.

Ran 2-3/8" tbg w/ Baker "FL" on - off tool w/ 1.81" I.D.
profile ("F") nipple, Baker 4-1/2" Lok-Set PKR, 122.9'
VTC Perforating - Production Assembly. Bottom of
Baker 4-1/2" Lok-Set PKR @ 10,642.4' (VTC depth).

Perforated 4-1/2" production liner @ 10,685'-10,753',
10,760' - 10,765' (10,685' - 10,765' overall), w/1 SPF
((73) 0.5" holes).



Surface String

Hole Size: 13-3/4"
Casing Size: 10-3/4"
Weight: 40.5#
Grade: K-55
Setting Depth: 880'
Cement: 550 sx
TOC: Circ

Intermediate String

Hole Size: 9-1/2"
Casing Size: 7-5/8"
Weight: 26.4#, 29.7#
Grade: K-55, N-80
Setting Depth: 6,805'
Cement: 1,450 sx
TOC: Circ

Packer

Type: Baker "LS"
Size: 4-1/2"
Setting Depth: 10,642'
(VTC depth)

Production String

Hole Size: 6-3/4"
Casing Size: 4-1/2"
Weight: 11.6#
Grade: K-55, N-80
Setting Depth: 10,860'
Liner Top: 6,562'
Cement: 850 sx
TOC: 6,562'

Tubing String

Size: 2-3/8"
Weight: 4.7#
Grade: N-80
Setting Depth: 10,645'

PBTD: 10,850'

TD: 10,860'

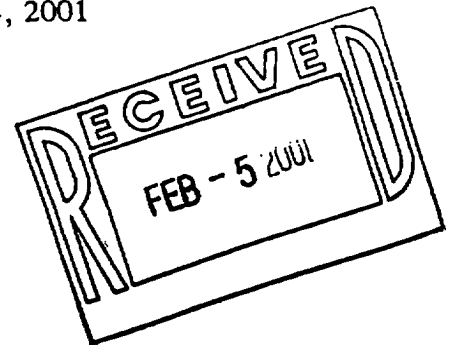


Duke Energy Field Services, L.L.C.
3300 North "A" Street, Building 7
Midland, Texas 79705-5421
P.O. Box 50020
Midland, Texas 79710-0020

January 24, 2001

VIA CERTIFIED MAIL; RETURN RECEIPT

Doyle Hartman
Oil Operator
3811 Turtle Creek Blvd., Suite 200
Dallas, Texas 75219



RE: State "BV" No. 1
S/2 Section 25 T-17S-R-28E
Eddy County, New Mexico
Gas Purchase Contract: LEE 0644-00* (dated August 25, 1986)
DEFS Meter No. 0681-076019-00

Gentlemen:

Duke Energy Field Services, LP ("DEFS") has been purchasing gas from the subject lease on a month to month basis, subsequent to your June 11, 1997 notice of termination of the subject contract. We have recently experienced problems meeting our residue gas quality specifications out of our Artesia Plant due to oxygen content, and have traced the high oxygen content in our gathering system to your lease. Due to increased oxygen content in the gas received by DEFS at this meter, DEFS can no longer accept deliveries of gas from this delivery point. Please accept this as our notification that, effective March 1, 2001, DEFS will disconnect the subject meter station and discontinue receipt of gas from this delivery point.

Yours truly,

Lewis C. Short, Agent
(915) 620-4056

LCS:ydg